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ABSTRACT

This volume consists of a number of appendixes containing data and analyses that were compiled to aid administrators of the Skyline Wide Educational Plan (SWEP) in their efforts to develop a comprehensive secondary school plan for the Dallas-Fort Worth metroplex in the 1970's. Much of the volume is devoted to various facility considerations relevant to SWEP. In addition, separate appendixes focus on metroplex student demographic data, metroplex manpower needs, site considerations (Love Field and Redbird Airport), political and legal considerations, a summary log of some interviews by the SWEP staff, and a financial status report on SWEP. (JG)

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ED111081

# VOLUME II

(Appendices)

# SKYLINE WIDE EDUCATIONAL PLAN

(SWEP)

A
PROJECT FOR PLANNING
THE SECONDARY SCHOOL OF THE FUTURE
TO SERVE
THE DALLAS-FORT WORTH METROPLEX

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
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EA 007 450

dallas independent school district

VOLUME II -- APPENDICES

# SKYLINE WIDE EDUCATIONAL PLAN

(SWEP)

PLANNING PROJECT

COMBINED QUARTERLY REPORT NO. 4 (APRIL 1 TO JUNE 30, 1974)

AND

FINAL REPORT (JULY, 1973 TO AUGUST, 1974)

PREPARED FOR:

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

OFFICE OF EDUCATION

BUREAU OF EQUAL EDUCATIONAL OPPORTUNITY

SPECIAL PROJECTS BRANCH

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# APPENDIX 1

# METROPLEX STUDENT DEMOGRAPHIC DATA

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III. Forecasts of Pupil Socio-Economic Backgrounds
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## INTRODUCTION

One of the first conclusions reached at the outset of Project SWEP was that an essential design element required for modeling the "School of the Future" would be a comprehensive body of information about the pupil population of the future. Other subsidiary conclusions which were formulated early in the Project, and which have served somewhat as guides to Project efforts relative to the need for information about the future school's prospective pupil population are listed below, without any attempt to present with each its derivation or justification. The justification for each statement of conclusion or assumption is self-evident, per se, or can be found either in other parts of the final Project report, or in Project files and records, or can be inferred from the presentations in subsequent sections of this Appendix. These are the subsidiary conclusions:

1. The interrelation between pupil population, program design, and facility design and location is highly reflexive. In other words, pupil population characteristics are determinants of program design and, at the same time, the pupil population that can be served by a school is limited by the programs to be provided and by the location and design of the facility; therefore, any application of the Project school Model to a specific instance of school planning will require a pupil population information base relevant to and definitive for the particular instance.
2. The requirement for extensive pupil population data in modeling the Project school justifies both a futures-oriented pupil needs assessment program and a precast of pupil demographic data.
3. The Project's contract-and-grant documents require that the

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2. The requirement for extensive pupil population data in modeling the Project school justifies both a futures-oriented pupil needs assessment program and a precast of pupil demographic data.
3. The Project's contract-and-grant documents require that the Project-resultant school be so designed and modeled that it can or will have a prospective student body having, within prescribed limits, certain ratios of pupils of various ethnic and socio-economic backgrounds. This requirement mandates the creation of a pupil demographic data base separate from and in addition to the information to be assembled from the pupil needs assessment.

4. The production of forecasts of future pupil demographic data is also warranted by the fact that in any application of the universal Model of the Project school within the two core Metroplex counties there is a very high probability that the determination of the prospective pupil enrollment will involve at least in part the use of geographic areas (territory) as a basis. While conceivably the entire prospective student body of the future school, in some applications of the Model, could be defined in terms of selective admissions criteria rather than primarily on a geographic basis, there would, perforce, still be some geographic limitation placed on the gross pupil population from which the enrollees will be drawn (whether stated in terms of parts of school districts, or an array of several whole districts' territories, or of parts of a county, or of parts of both counties). The point is that even if future planners and decision makers who may refer to this report will wish to use selective admissions (of pupils with certain clearly defined special needs deriving from characteristic or individual handicaps, aptitudes, propensities, or talents) as the major factor in constituting the prospective student body, they still must ultimately circumscribe geographically the territory from which the enrollees will be drawn; therefore, the need will exist for demographic data on pupils residing within the defined territory. Such planners will need to have some general idea as to the total number of school-age children residing within the specified area, approximately what proportion of that total will be expected to attend private schools, what proportion of the prospective public school enrollees will be at each of various stages of educational development, what their family

school districts, or an array of several whole districts' territories, or of parts of a county, or of parts of both counties). The point is that even if future planners and decision makers who may refer to this report will wish to use selective admissions (of pupils with certain clearly defined special needs deriving from characteristic or individual handicaps, aptitudes, propensities, or talents) as the major factor in constituting the prospective student body, they still must ultimately circumscribe geographically the territory from which the enrollees will be drawn; therefore, the need will exist for demographic data on pupils residing within the defined territory. Such planners will need to have some general idea as to the total number of school-age children residing within the specified area, approximately what proportion of that total will be expected to attend private schools, what proportion of the prospective public school enrollees will be at each of various stages of educational development, what their family ethnic and socio-economic backgrounds will be, and a galaxy of other demographic characteristics. This constitutes the strongest rationale for the Project to accept the responsibility for the production of forecasts of future pupil demographic data applicable to parts, as well as to the whole, of the two core counties.

5. There was overwhelming evidence that *all* aspects of pupil characteristics could not be included in the demographic data to be assembled and organized. In the first place, the resources and duration of the Project would not permit the creation of a truly comprehensive and complete data base. Such a data base will be available, whenever needed, from the current files of each school district that may be involved in a future application of the Project school Model. Finally, it was apparent that because no significant change in certain characteristics of pupils are expected during the forecast time frame of the Project there would be no real need to include such characteristics in the demographic data base (for example, there is no reasonable expectation that the *percentage* of the total pupil population that are deaf, or blind, or paraplegic, or dyslexic will be different in 1980 or 1985 than now) and, while data on such characteristics will be needed in the future, they should be excluded from the Project demographic data collection.

The net effect of consideration of the foregoing was agreement to *limit* the generation of forecasts of pupil demographic data to the following:

(a) for each county and for each geographic part of the two-county area (regardless of the definition of the geographic units) the total number of "all-levels" and secondary-level prospective enrollees, differentiated as to ethnic category;

(b) for each county and each geographic unit of the two-county area, indicators of the future socio-economic status of all the public school enrollees as well as the percentage of such enrollees that will be from families below certain categories of family income.

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(b) for each county and each geographic unit of the two-county area, indicators of the future socio-economic status of all the public school enrollees as well as the percentage of such enrollees that will be from families below certain categories of family income.

In summary, it should be stated that the need for limited forecasts of pupil demographic data was recognized, and there was agreement that the creation of a pupil demographic data base should be included within the scope of Project SWEP.

# FORECASTS OF PUPIL ENROLLMENTS

## A. Guidelines For Generating Forecasts

Once the decision had been made to create a forecast of a limited pupil demographic base, in addition to the information about pupils that would be provided through the Project pupil needs assessment effort, the next questions had to do with how the forecasts of the future demographic data would be derived, organized, and presented. The following guidelines for the demographic studies were adopted:

1. The two central counties of the Metroplex would be divided into geographic statistical areas to serve as the units for deriving both (a) refined estimates of the number of prospective pupil enrollees residing therein, and (b) the indicators of socio-economic status of the families of the prospective enrollees. (The derivation and data pertaining to the indications of socio-economic condition are presented in the succeeding section of this Appendix).
2. The refined forecasts of prospective pupil enrollees would include, for each geographic statistical area, not only the estimates of the total prospective pupil enrollment for the 1980-81 and the 1985-86 school years for all grade levels (Grades K-12) and for the secondary-level alone (Grades 9-12) but also estimates of the number of resident enrollees from each of the principal racial/ethnic categories.
3. The derivation process for both the forecasts of pupil enrollments and the indicators of future socio-economic status of pupils' families within each statistical area would include, but not be limited to, linear projections of current data and clearly defined trends to 1980 and 1985. The derivation process would also include refinements of the raw estimates obtained from the linear projections, when used, by means of

prospective enrollees. (The derivation and data pertaining to the indications of socio-economic condition are presented in the succeeding section of this Appendix).

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3. The derivation process for both the forecasts of pupil enrollments and the indicators of future socio-economic status of pupils' families within each statistical area would include, but not be limited to, linear projections of current data and clearly defined trends to 1980 and 1985. The derivation process would also include refinements of the raw estimates obtained from the linear projections, when used, by means of the application of all the known enrollment-influencing and population-influencing factors considered to be relevant to the study and relevant to the Metroplex.

## B. Derivation of the Forecasts of Pupil Enrollments

1. The geographic statistical areas which have been subjected to pupil population forecasting for the Project were determined on the basis of present high school attendance zones throughout Dallas and Tarrant counties and were designated as follows:

   a. In the Dallas and Fort Worth school districts each statistical geographic area consists either of a single, geographically large high school's attendance zone (1973-74 delineation) or of several geographically contiguous high schools' attendance zones. All of the statistical areas in these two districts for purposes of this Project study are identified by one or more of the names of the high schools whose attendance zones constitute the respective statistical areas and they are enumerated and further identified in the tables and figures presented with Roman numerals.

   b. In all other school districts of the two counties included in the SWEP demographic studies, each of the statistical geographic areas consists of a single "high school" attendance zone (as delineated by the respective district for 1974), is designated by the name of the high school to which it normally is assigned, and is identified in the tables and figures of this report with an Arabic numeral.

The accompanying maps, Figures A-1 and A-2, show the location and geographic configuration of each of the statistical areas for which data was derived. The reader will note that there is great variance in territorial dimensions as well as density of population.

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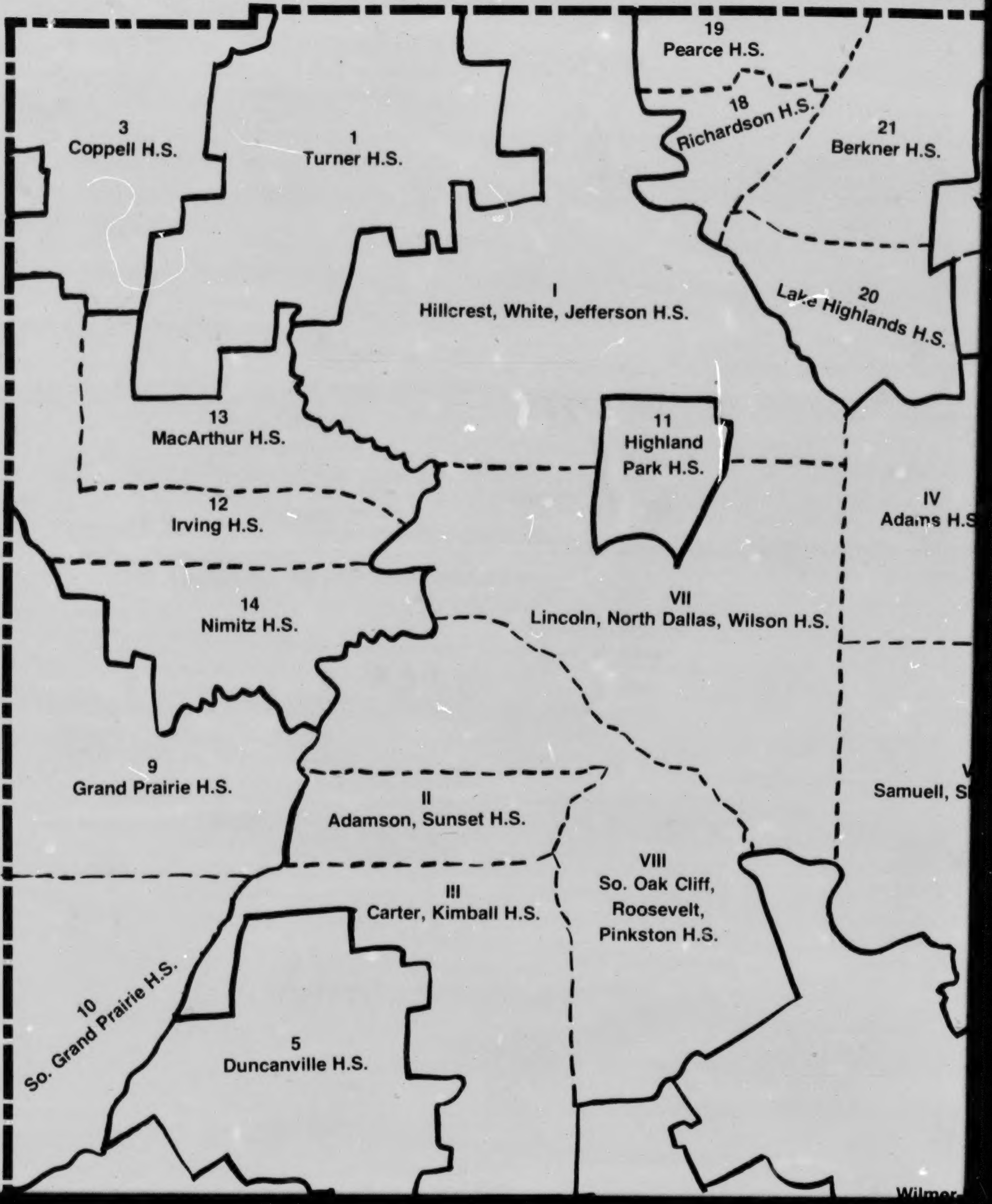
Mention should be made at this point of the special treatment and the reasons for special treatment given to territory and pupils of the so-called "county line" districts of which there are several in Dallas and Tarrant counties. These districts and their treatment in SWEP demographic studies are as follows:

FIGURE A-1

DALLAS COUNTY

DESIGNATIONS, LOCATION, AND BOUNDARIES OF THE GEOGRAPHIC STATISTICAL AREAS USED FO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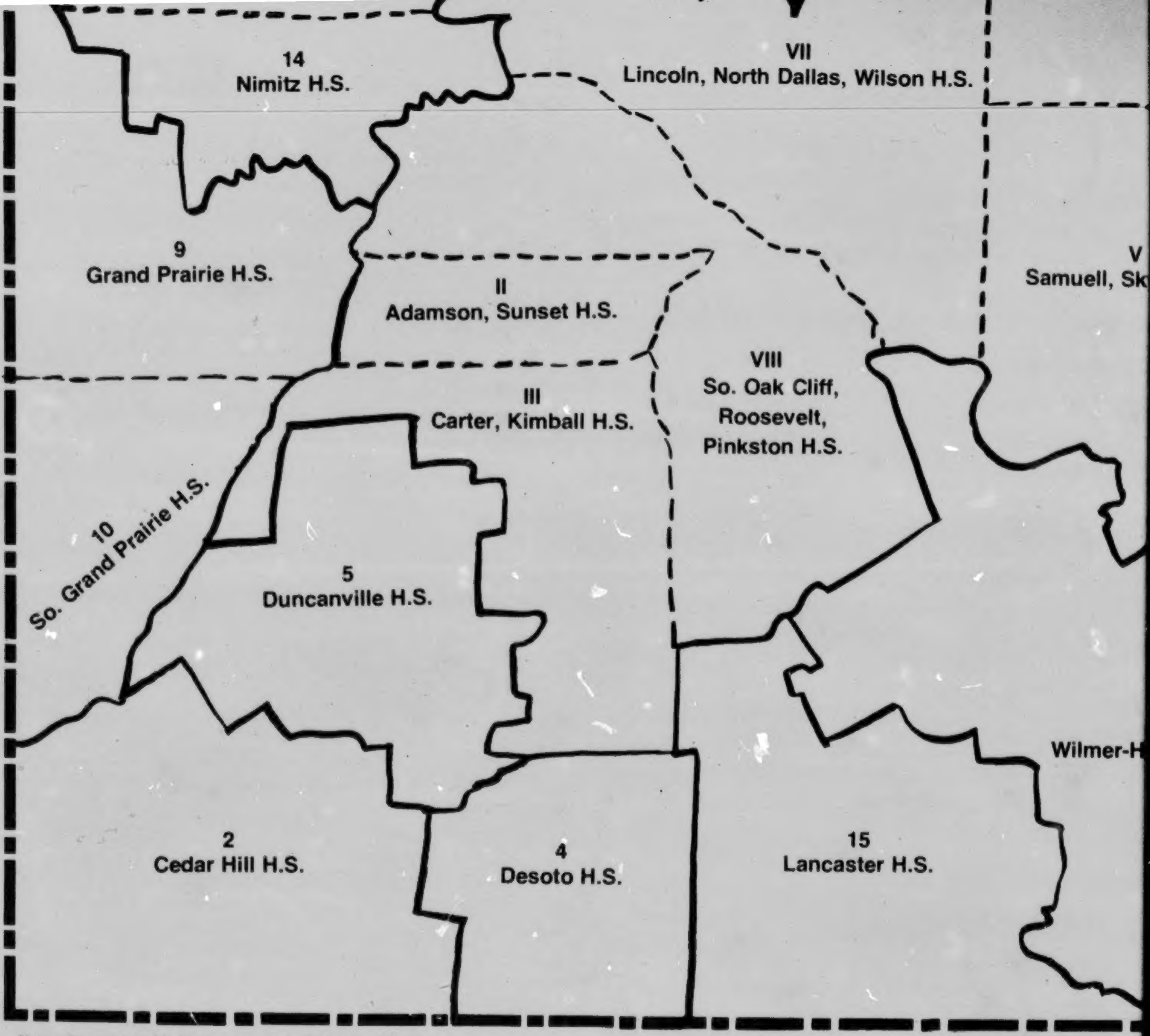
Pearce H.S.
18
Richardson H.S.
21
Berkner H.S.
3
Coppell H.S.
1
Turner H.S.
I
Hillcrest, White, Jefferson H.S.
20
Lake Highlands H.S.
13
MacArthur H.S.
11
Highland
Park H.S.
12
Irving H.S.
IV
Adams H.S
14
Nimitz H.S.
VII
Lincoln, North Dallas, Wilson H.S.
9
Grand Prairie H.S.
II
Adamson, Sunset H.S.
V
Samuell, S
III
Carter, Kimball H.S.
VIII
So. Oak Cliff,
Roosevelt,
Pinkston H.S.
10
So. Grand Prairie H.S.
5
Duncanville H.S.
Wilmer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Lincoln, North Dallas, Wilson H.S.
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Grand Prairie H.S.
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Adamson, Sunset H.S.
V
Samuell, Sk
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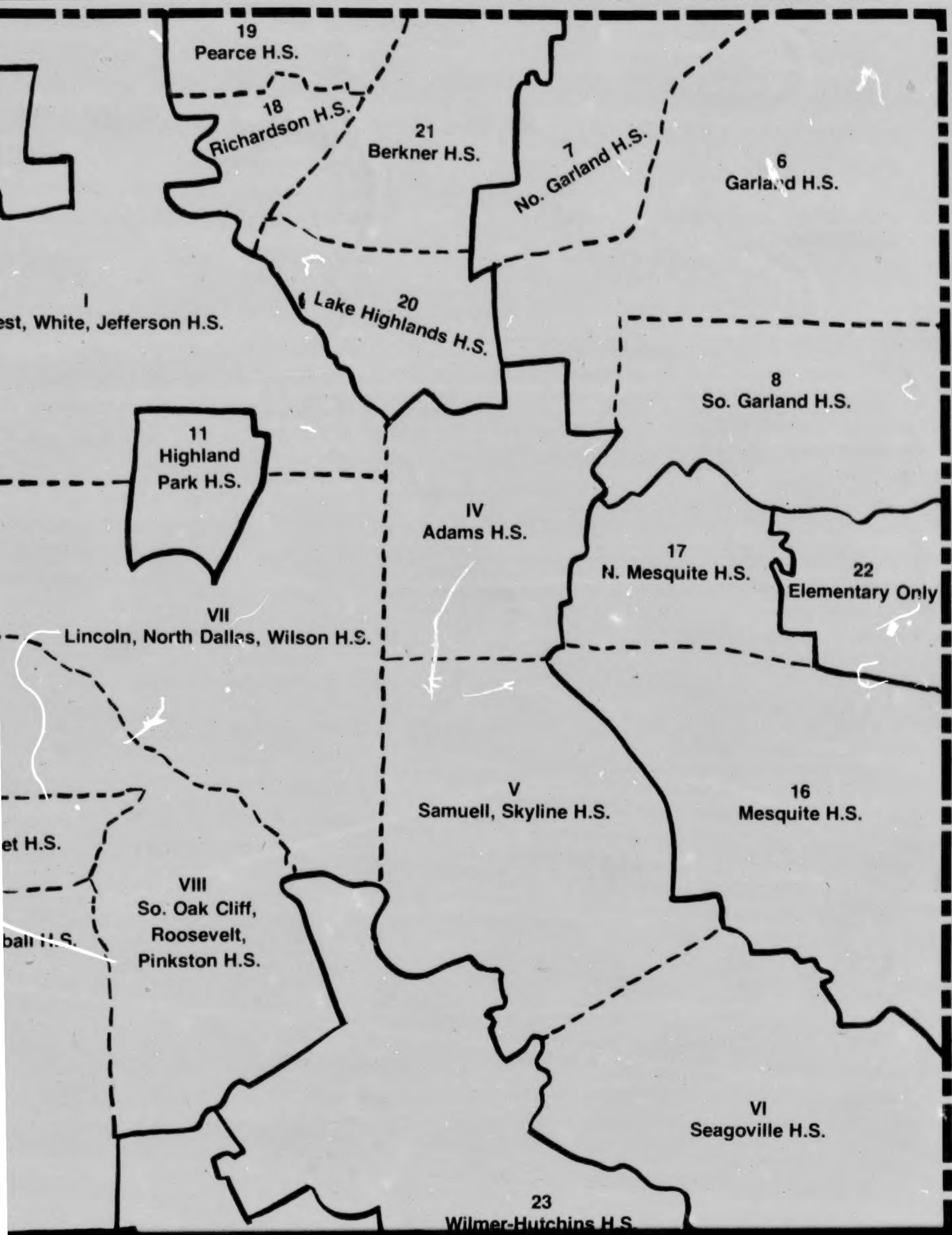
So. Oak Cliff,
Roosevelt,
Pinkston H.S.
III
Carter, Kimball H.S.
10
So. Grand Prairie H.S.
5
Duncanville H.S.
Wilmer-H
2
Cedar Hill H.S.
4
Desoto H.S.
15
Lancaster H.S.

Numerals correspond to those appearing in Tables P-1, P-2, P-8

FIGURE A-1
DALLAS COUNTY
ES OF THE GEOGRAPHIC STATISTICAL AREAS USED FOR PROJECT DEMOGRAPHIC STUDIES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Richardson H.S.
21
Berkner H.S.
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No. Garland H.S.
6
Garland H.S.
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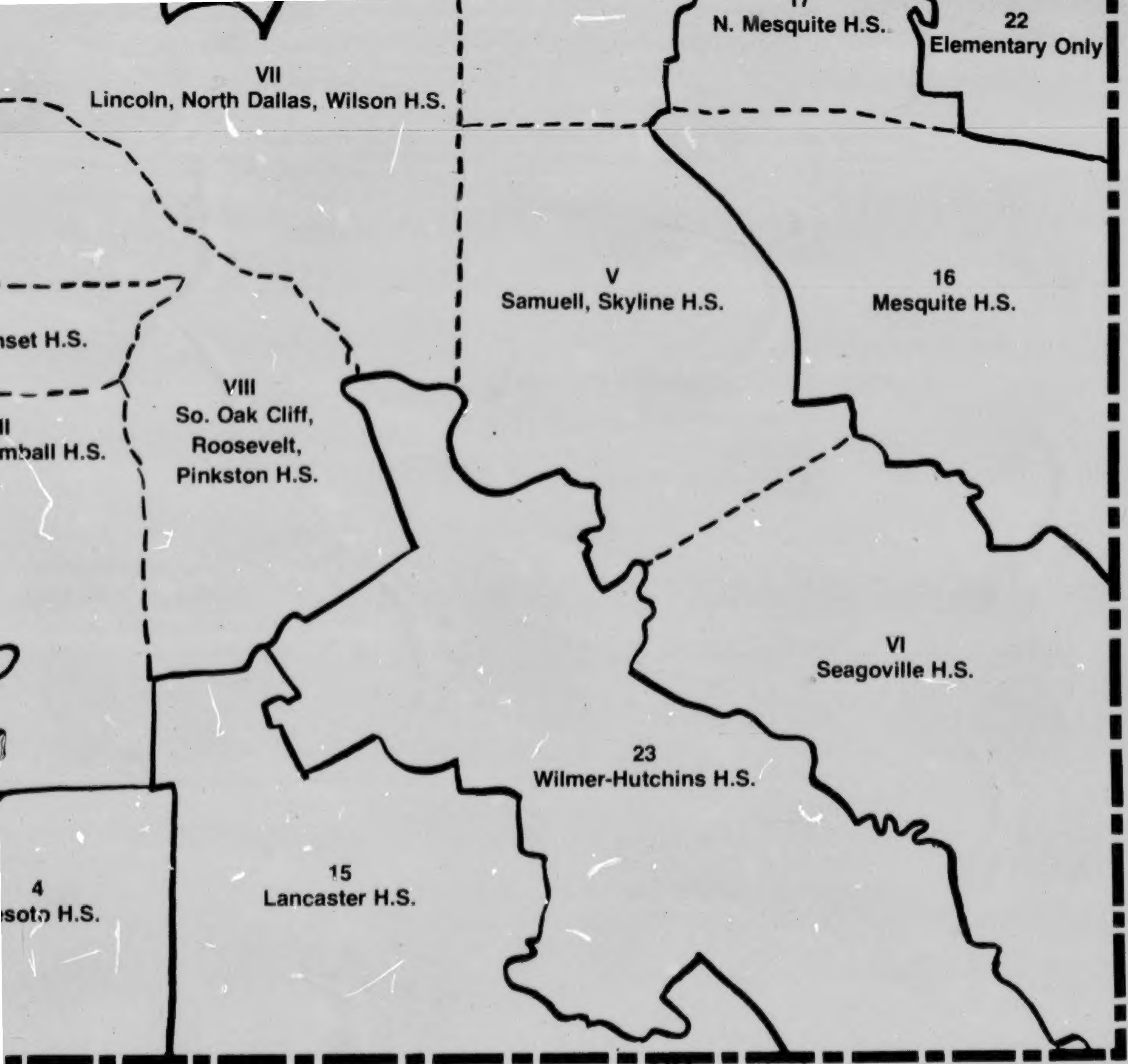
est, White, Jefferson H.S.
20
Lake Highlands H.S.
8
So. Garland H.S.
11
Highland
Park H.S.
IV
Adams H.S.
17
N. Mesquite H.S.
22
Elementary Only
VII
Lincoln, North Dallas, Wilson H.S.
V
Samuell, Skyline H.S.
16
Mesquite H.S.
et H.S.
VIII
So. Oak Cliff,
Roosevelt,
Pinkston H.S.
ball H.S.
VI
Seagoville H.S.
23
Wilmer-Hutchins H.S.


N. Mesquite H.S.
22
Elementary Only
VII
Lincoln, North Dallas, Wilson H.S.
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Samuell, Skyline H.S.
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Mesquite H.S.
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So. Oak Cliff,
Roosevelt,
Pinkston H.S.
II
mball H.S.
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Seagoville H.S.
23
Wilmer-Hutchins H.S.
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Lancaster H.S.
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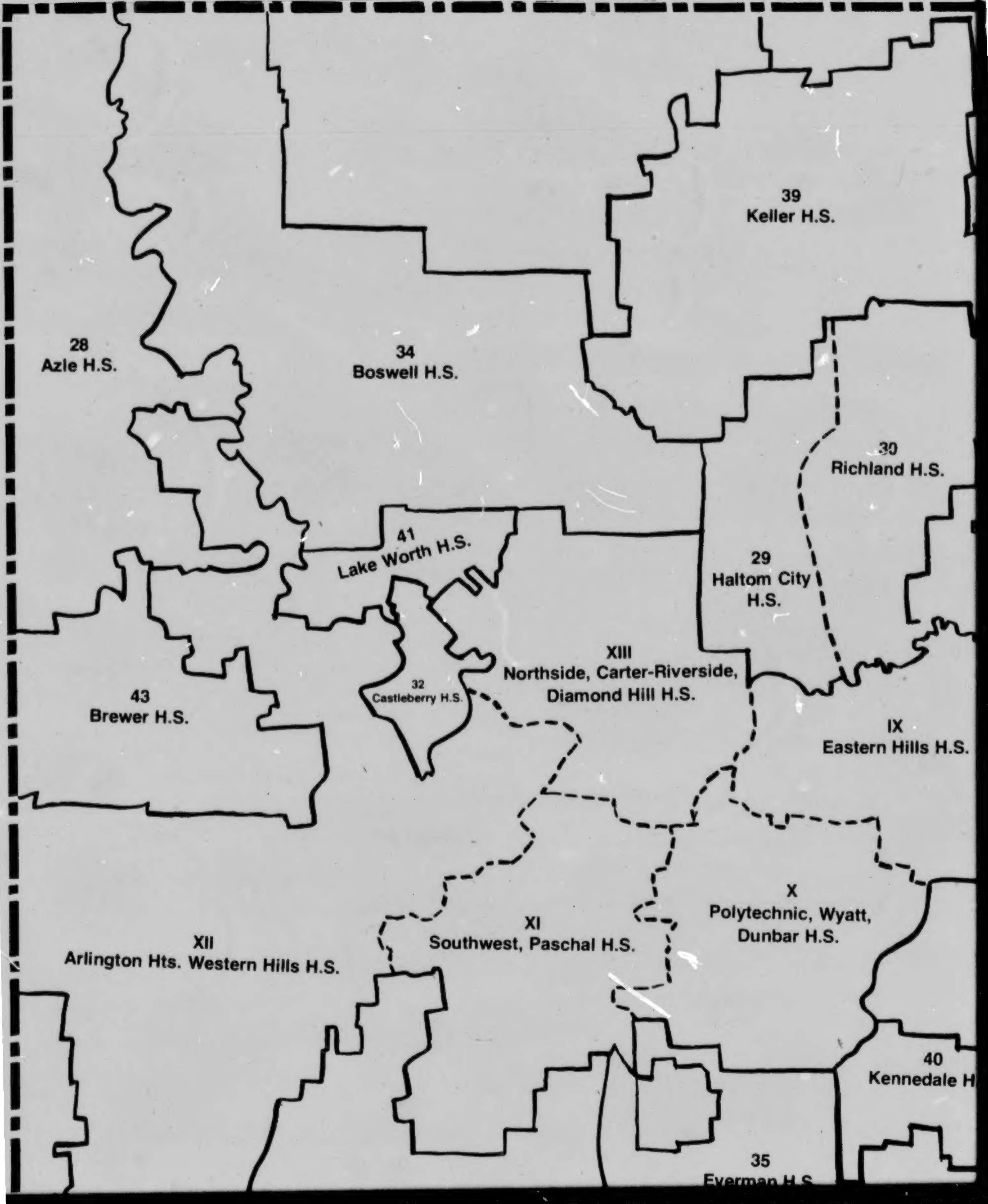
FIGURE A-2
TARRANT COUNTY
DESIGNATIONS, LOCATION, AND BOUNDARIES OF THE GEOGRAPHIC STATISTICAL AREAS USED FOR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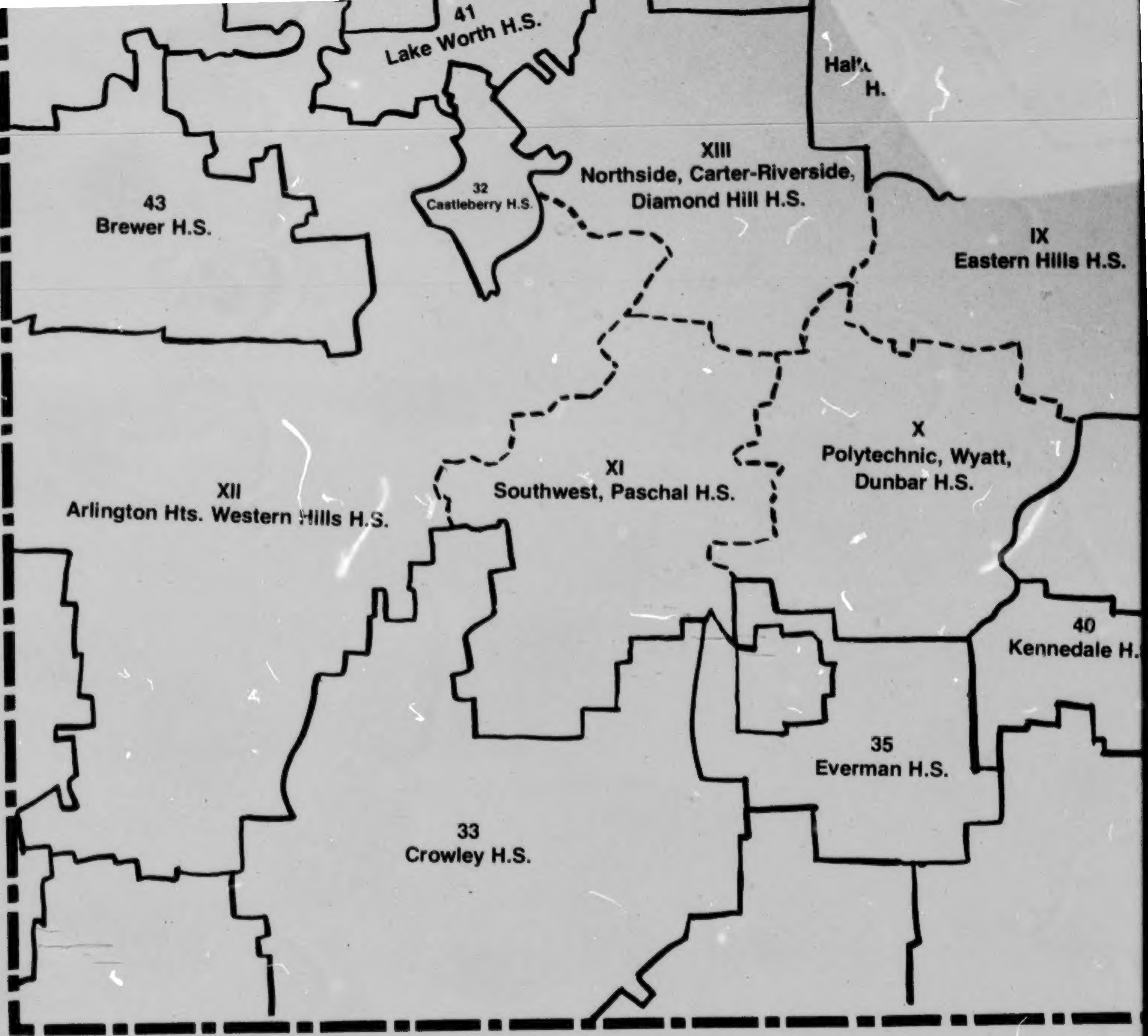
Keller H.S.
28
Azle H.S.
34
Boswell H.S.
30
Richland H.S.
41
Lake Worth H.S.
29
Haltom City
H.S.
XIII
Northside, Carter-Riverside,
Diamond Hill H.S.
32
Castleberry H.S.
43
Brewer H.S.
IX
Eastern Hills H.S.
X
Polytechnic, Wyatt,
Dunbar H.S.
XI
Southwest, Paschal H.S.
XII
Arlington Hts. Western Hills H.S.
40
Kennedale H
35
Everman H.S.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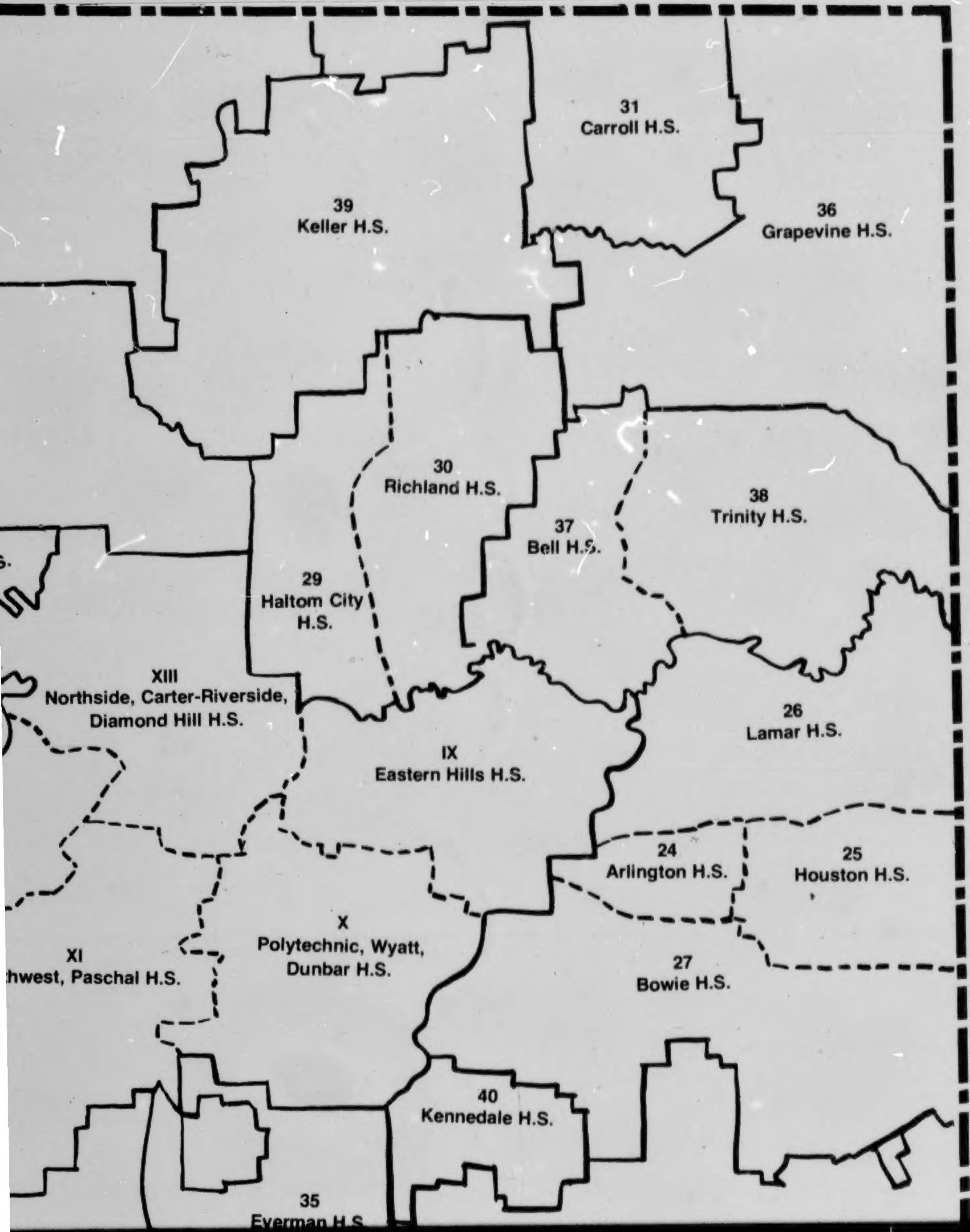
Lake Worth H.S.
Hal
H.
43
Brewer H.S.
32
Castleberry H.S.
XIII
Northside, Carter-Riverside,
Diamond Hill H.S.
IX
Eastern Hills H.S.
X
Polytechnic, Wyatt,
Dunbar H.S.
XI
Southwest, Paschal H.S.
XII
Arlington Hts. Western Hills H.S.
40
Kennedale H.
35
Everman H.S.
33
Crowley H.S.

Numerals correspond to those appearing in Tables P-1, P-2, P-8

FIGURE A-2

TARRANT COUNTY

RIES OF THE GEOGRAPHIC STATISTICAL AREAS USED FOR PROJECT DEMOGRAPHIC STUDIES


31
Carroll H.S.
39
Keller H.S.
36
Grapevine H.S.
30
Richland H.S.
38
Trinity H.S.
37
Bell H.S.
s.
29
Haltom City H.S.
XIII
Northside, Carter-Riverside, Diamond Hill H.S.
26
Lamar H.S.
IX
Eastern Hills H.S.
24
Arlington H.S.
25
Houston H.S.
X
Polytechnic, Wyatt, Dunbar H.S.
XI
hwest, Paschal H.S.
27
Bowie H.S.
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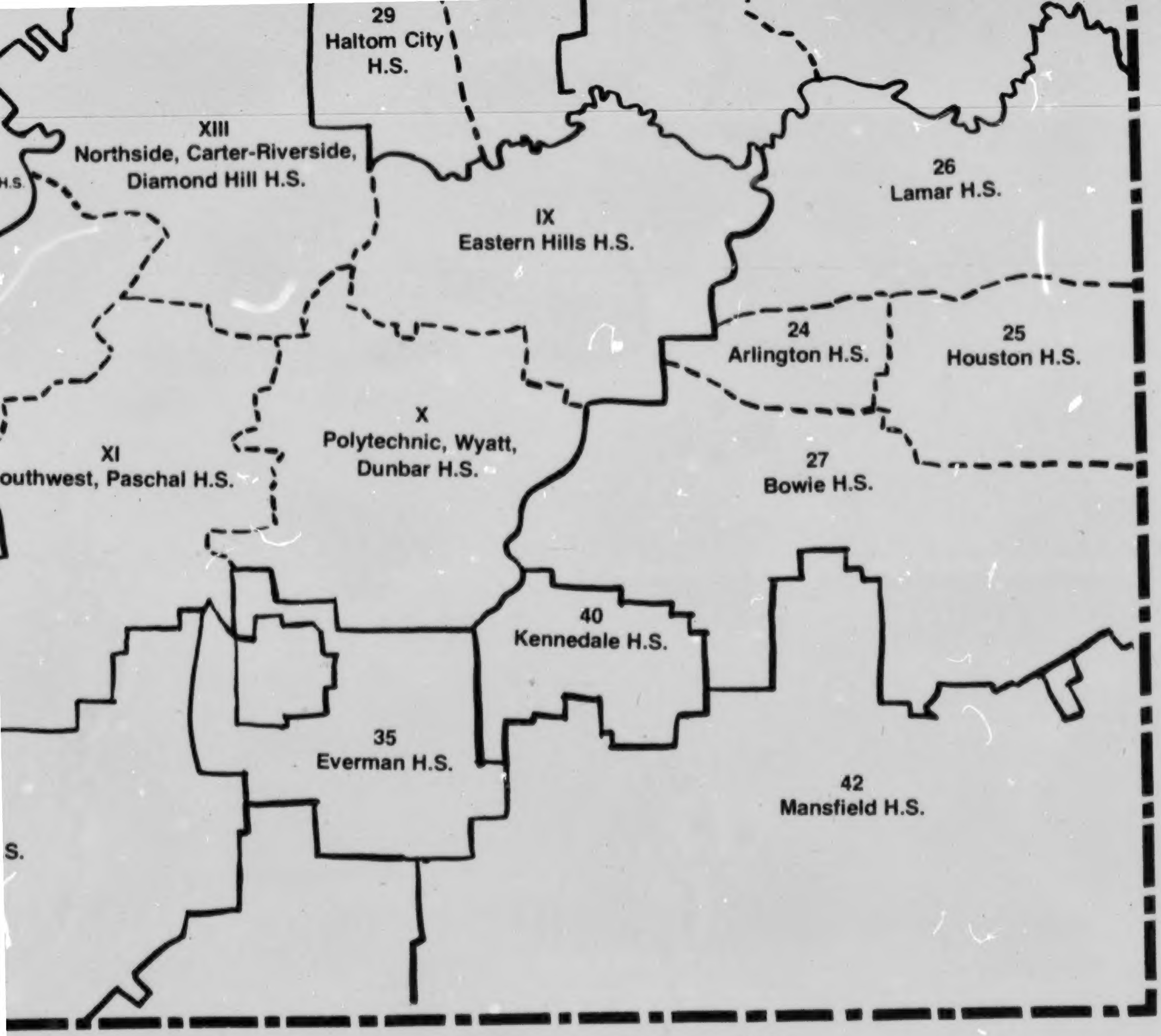
Kennedale H.S.
35
Everman H.S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Haltom City
H.S.
XIII
Northside, Carter-Riverside,
Diamond Hill H.S.
H.S.
IX
Eastern Hills H.S.
26
Lamar H.S.
24
Arlington H.S.
25
Houston H.S.
X
Polytechnic, Wyatt,
Dunbar H.S.
XI
outhwest, Paschal H.S.
27
Bowie H.S.
40
Kennedale H.S.
35
Everman H.S.
42
Mansfield H.S.
S.

Grapevine ISD has the major part of its territory in Tarrant County with a very small area in Dallas County and was treated statistically as though all its pupils (present and future) were in Tarrant County. Those pupils residing in Dallas County arbitrarily included in Grapevine High School attendance area figures and are included in Tarrant County totals.

Aledo ISD lies principally in Parker County with a very small bit of territory in Tarrant County. The Aledo pupils living in Tarrant County, if any, were ignored and entirely excluded from SWEP demographic studies.

Azle ISD lies principally in Tarrant County with a minor area situated in Parker County. All of Azle ISD pupils were treated as though they lived in Tarrant County.

Burleson ISD lies principally in Johnson County with a small part of its total territory in Tarrant County. Burleson ISD, as of 1973-74 school year had 327 pupils (of a total district enrollment of 4479) living in Tarrant County, of which approximately 284 were white, 32 black, 6 American Indian, and 5 Spanish surnamed. Burleson ISD pupils living in Tarrant County were excluded from SWEP studies and data; they should be considered for inclusion in any future updating of Tarrant County pupil demographic studies.

Godley ISD, headquartered and having the major part of its territory in Johnson County, has some territory and very few pupils in Tarrant County; therefore, it, and its Tarrant County resident pupils, were excluded from SWEP demographic studies.

Mansfield ISD lies principally in Tarrant County but covers a small territory in Johnson County. All of Mansfield ISD pupils were treated in SWEP studies as though they lived in Tarrant County, even though as of 1973-74 school year, approximately 140 of them actually resided in Johnson County.

Crowley ISD, with the major part of its territory situated in Tarrant County and a small remainder within Johnson County, had so few enrolled pupils residing in Johnson County (approximately 25 pupils) that all Crowley ISD pupils, present and future, were included statistically in SWEP studies as though they were Tarrant County residents of that district.

Carrollton-Farmers Branch ISD was treated as though all of its pupils were and would be Dallas County residents even though about 1 to 1½ percent live in the small Denton County part of the school district; such pupils were also included in the Dallas County "totals" data.

Ferris ISD has an almost miniscule part of its district territory in Dallas County. At the time of SWEP studies that school district had no regular enrolled pupils living in Dallas County, so Ferris ISD was excluded entirely from SWEP studies.

Northwest ISD has over 90% of its enrollees living in Denton County where most of its school facilities and a little more than one half of its territorial jurisdiction lies. A large but minority part of its total area is sparsely settled and is in Tarrant County where only about 180 white pupils, 20 Spanish surnamed pupils, and no black nor Asian American pupils of its total student body reside; and, further, most of those Tarrant County resident pupils attend schools located resident pupils, were excluded from SWEP demographic studies.

Mansfield ISD lies principally in Tarrant County but covers a small territory in Johnson County. All of Mansfield ISD pupils were treated in SWEP studies as though they lived in Tarrant County, even though as of 1973-74 school year, approximately 140 of them actually resided in Johnson County.

Crowley ISD, with the major part of its territory situated in Tarrant County and a small remainder within Johnson County, had so few enrolled pupils residing in Johnson County (approximately 25 pupils) that all Crowley ISD pupils, present and future, were included statistically in SWEP studies as though they were Tarrant County residents of that district.

Carrollton-Farmers Branch ISD was treated as though all of its pupils were and would be Dallas County residents even though about 1 to 1½ percent live in the small Denton County part of the school district; such pupils were also included in the Dallas County "totals" data.

Ferris ISD has an almost miniscule part of its district territory in Dallas County. At the time of SWEP studies that school district had no regular enrolled pupils living in Dallas County, so Ferris ISD was excluded entirely from SWEP studies.

Northwest ISD has over 90% of its enrollees living in Denton County where most of its school facilities and a little more than one half of its territorial jurisdiction lies. A large but minority part of its total area is sparsely settled and is in Tarrant County where only about 180 white pupils, 20 Spanish surnamed pupils, and no black nor Asian American pupils of its total student body reside; and, further, most of those Tarrant County resident pupils attend schools located in Denton County. This district and its current and future pupil population were excluded from SWEP demographic studies because it was believed that within the Project time frame there would be no real significance for the data contributed. However, consideration should be given in any subsequent updating of these demographic studies, to the Tarrant County portion of this district's territory, for it is likely that at some time after 1980 rather large scale "spill over" residential and commercial-industrial development will begin to occur in this area as the territory between this area and the Fort Worth ISD and the areas around the International Airport approach residential saturation.

In these demographic studies it was assumed that on the basis of "off-setting" variances, in each county and in each geographic attendance area, the exclusions would so nearly counter-balance statistically and match in characteristics the arbitrary inclusions of extra-territorial pupils, that no serious violence would be created in the significance of demographic data derived thereby; and that in any event, no real damage would accrue to the usefulness of the studies in future educational planning in any of the school districts involved in the studies.

2. As mentioned in a preceding section of this Appendix, the plan for deriving the forecasts of pupil enrollments in each of the geographic statistical areas called for starting from a base of recent and current "hard" enrollment data for each area and projecting such data linearly to 1980-81 and 1985-86. It was fortunate that there was available, for each public school operated in the two counties, an exact source of pupil enrollment data, including the distribution of the enrollments among the principal ethnic component categories ("American Indian", "Black", "Asian", "Spanish-surnamed", and "Other"). That source was each district's report to the Texas Education Agency for each of its schools, as of October 1 each school year commencing with the 1969-70 school year and extending to the present school year. The data contained in that source served as a three-year (the interval was three years even though data was for four years) base line from which to extend the linear projections. (No attempt is made even in appendix form to present the voluminous aggregation of the basic data, but it is presumed that it will be preserved in Project files). Rigorous introspective examination of the basic data for

1980-81 and 1985-86. It was fortunate that there was available, for each public school operated in the two counties, an exact source of pupil enrollment data, including the distribution of the enrollments among the principal ethnic component categories ("American Indian", "Black", "Asian", "Spanish-surnamed", and "Other"). That source was each district's report to the Texas Education Agency for each of its schools, as of October 1 each school year commencing with the 1969-70 school year and extending to the present school year. The data contained in that source served as a three-year (the *interval* was three years even though data was for four years) base line from which to extend the linear projections. (No attempt is made even in appendix form to present the voluminous aggregation of the basic data, but it is presumed that it will be preserved in Project files). Rigorous introspective examination of the basic data for each statistical area, and for the various school districts as whole units of data, and comparison of the data changes for those respective units during the data base period with the changes and trends that had been evident in the equivalent historical time frame *preceding* the data base period gave rise to doubt as to the validity of the data (as a linear projection base) for six of the Dallas ISD statistical areas, and for two school districts of Tarrant County immediately adjacent to Carswell Air Force Base and the General Dynamics plant. Analysis yielded the hypothesis that unusual population-influencing events* had occurred within or near to those areas, with effects of such magnitude on school enrollments that the data base for those areas could not be considered reliable. For those areas, before proceeding with the linear projections, immediate remedy was undertaken to "correct" the data by reconstructing what would in all probability have happened to school enrollments had those significant population-influencing events not occurred as might be determined from trends active prior to 1969. After that "correction" and an adjustment of the basic enrollment data had been made, the linear projections were calculated for both total enrollments and the enrollments for each ethnic category for each statistical area. The products of that linear projection were then considered to be "raw" or crude forecast estimates which, for accuracy and utility, would require refinement in the light of the known factors which affect school enrollments (and total population).

3. The factors used in varying degree from statistical area to statistical area, depending on the degree and extent of relevancy in each case, to derive the refined estimates of pupil enrollments through attentuation and modification of the crude estimates, were as follows:

   a. The expected net inmigration (gross in-migration rate less the outmigration), in the case of areas undergoing population growth and the converse, net out-

and an adjustment of the basic enrollment data had been made, the linear projections were calculated for both total enrollments and the enrollments for each ethnic category for each statistical area. The products of that linear projection were then considered to be "raw" or crude forecast estimates which, for accuracy and utility, would require refinement in the light of the known factors which affect school enrollments (and total population).

3. The factors used in varying degree from statistical area to statistical area, depending on the degree and extent of relevancy in each case, to derive the refined estimates of pupil enrollments through attentuation and modification of the crude estimates, were as follows:

   a. The expected net inmigration (gross in-migration rate less the outmigration), in the case of areas undergoing population growth and the converse, net outmigration in cases of decrease, is one of the two most affective factors influencing the general population. However, the rate of net outflow or influx has little real significance without a concomitant understanding of the forces, conditions, and circumstances which contribute to the influx and outflow

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* The desegregation court case and the orders emanating from that case, on the one hand, and reductions-in-force at General Dynamics resulting from contract reductions vis a vis production of the F111 aircraft.

of people into or out of an area. Some of the forces, events, or conditions that contribute to inflow and/or outflow of area population are: (1) new or markedly increased opportunity for employment in the geographic area or in nearby, easily accessible areas (such as the construction and opening of an airport or a large scale expansion of an existing plant) -- or a significant decrease of employment opportunities in the vicinity (as in the case of the closing down of a large processing facility); (2) addition to (or decrease in) the land stock (available land area) that can be devoted to housing development (such as lowering the flood plain of an area through extensive drainage engineering, or negatively, the routing of a new superhighway through an area set aside for residential development); (3) displacement of existing resident population (such as large scale condemnation of structures or enforcement of occupancy codes and ordinances); (4) changes in zoning; (5) large scale housing developments and the prospect of same; (6) prospective residential saturation of the area; (7) deterioration in the general quality of housing in a neighborhood (usually a very slowly acting but very potent force); and (8) various other miscellaneous events which can motivate people to move into, remain in, or move out of an area.

Space does not permit description of technical and exact application of each of these influences to the forecasts of future populations, but it should be mentioned in passing that it is quite common (in fact the usual situation) for population-decreasing forces to be active in an area simultaneously with aside for residential development); (3) displacement of existing resident population (such as large scale condemnation of structures or enforcement of occupancy codes and ordinances); (4) changes in zoning; (5) large scale housing developments and the prospect of same; (6) prospective residential saturation of the area; (7) deterioration in the general quality of housing in a neighborhood (usually a very slowly acting but very potent force); and (8) various other miscellaneous events which can motivate people to move into, remain in, or move out of an area.

Space does not permit description of technical and exact application of each of these influences to the forecasts of future populations, but it should be mentioned in passing that it is quite common (in fact the usual situation) for population-decreasing forces to be active in an area simultaneously with the working of population-increasing influences. Attention should also be called to the fact that the influence of a population-increasing or a population-decreasing element most often varies from time to time within an area, that is the visible effects seem to run in spurts -- more active at one time than at another; so that in forecasting population change the problem centers often around determining how soon after the occurrence of a significant event will the population effect begin to take place and how long it will take for the effect to peak and then to run its course.

b. The other of the two most affective factors influencing population, in reality a dual factor, is that of the birth rate and of the fertility rate. The two indices both give a reflection of origination of population changes within a group. They are closely related to each other but are different by definition (the birthrate being the number of live births each year for each 1000 of population, and the fertility rate being the current cumulative lifetime number of children that will be borne by the average female in the child-bearing cohort of the population in a given year). Both of these indices were taken into account in the refined forecasts of pupil enrollments derived in this demographic study. The following explanation will indicate the effects of each.

Beginning almost imperceptibly in 1959, and accelerating sharply in 1961, there has been, to the present, a very significant decline in the national total fertility rate of the general population. The drop in the national total fertility rate was from 3.712 lifetime births for the average female in the general population in 1959 to 2.02 in 1972, (the first year it has ever been less than the population replacement level of 2.11) and to 1.902 in 1973*. In the demographic studies of this Project, the projection of future enrollments has been based upon assumptions that (1) the fertility rate of each ethnic and racial cohort of the Metroplex population has been recently, and will be in the future, not significantly different from the national rates for those ethnic cohorts, (2) the total fertility rate, both regionally and nationally, will stabilize slightly below the present level (at approximately 1.86 in 1976) the refined forecasts of pupil enrollments derived in this demographic study. The following explanation will indicate the effects of each.

Beginning almost imperceptibly in 1959, and accelerating sharply in 1961, there has been, to the present, a very significant decline in the *national total fertility rate* of the general population. The drop in the *national total fertility* rate was from 3.712 lifetime births for the average female in the general population in 1959 to 2.02 in 1972, (the first year it has ever been less than the population replacement level of 2.11) and to 1.902 in 1973*. In the demographic studies of this Project, the projection of future enrollments has been based upon assumptions that (1) the fertility rate of each ethnic and racial cohort of the Metroplex population has been recently, and will be in the future, not significantly different from the national rates for those ethnic cohorts, (2) the *total* fertility rate, both regionally and nationally, will stabilize slightly below the present level (at approximately 1.86 in 1976) and thereafter gradually increase to a level at or slightly above the population replacement requirement, but (3) during that period of stabilization in the total fertility rate, the rate for the white and oriental components will not experience any significant further decrease while the rates for the Spanish surnamed, the Black, and the American Indian com-

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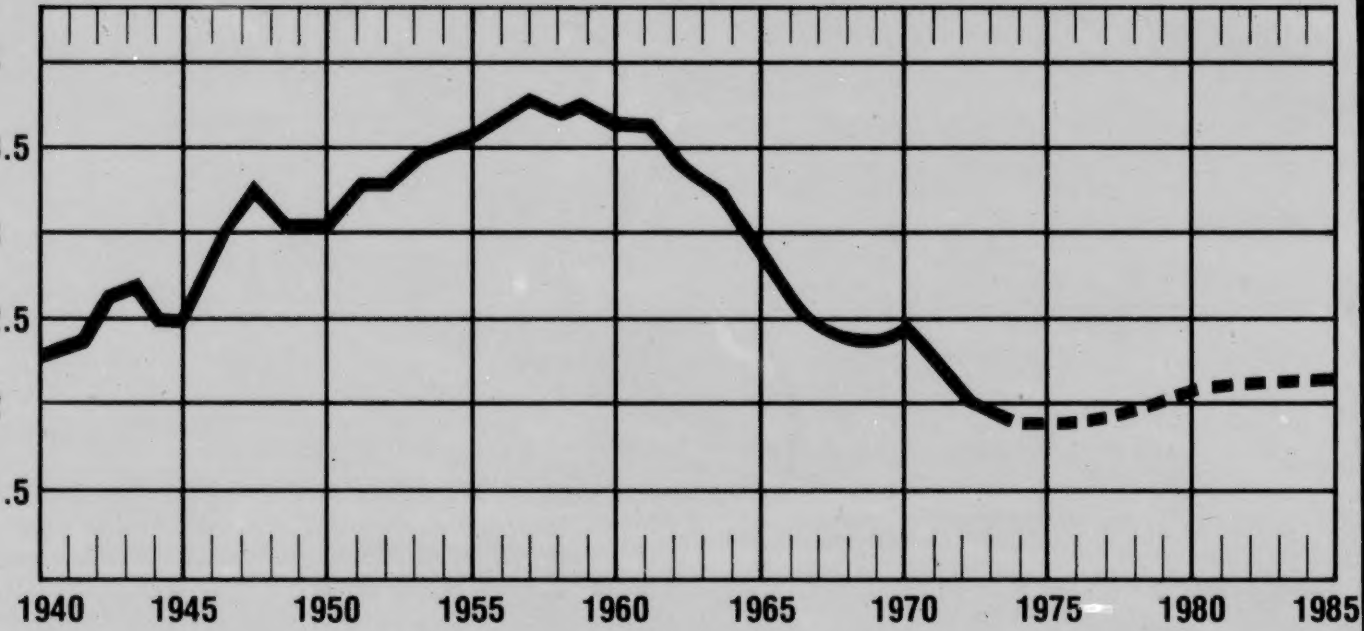
*See "Birthrate Drop Bodes Big Economic Changes" by Al Altwegg in the June 9, 1974 issue of *The Dallas Morning News* (comment on a report from the Bureau of Economic Analysis of the U.S. Dept. of Commerce).

Figure 1-C

TOTAL FERTILITY RATE (U.S.): 1940 to 1973 — Actual
1974 to 1985 — Estimated



| | |
|---|---|
| 1940 | 2.301 |
| 1941 | 2.399 |
| 1942 | 2.628 |
| 1943 | 2.718 |
| 1944 | 2.568 |
| 1945 | 2.491 |
| 1946 | 2.943 |
| 1947 | 3.274 |
| 1948 | 3.109 |
| 1949 | 3.110 |
| 1950 | 3.091 |
| 1951 | 3.269 |
| 1952 | 3.358 |
| 1953 | 3.424 |
| 1954 | 3.543 |
| 1955 | 3.580 |
| 1956 | 3.689 |
| 1957 | 3.767 |
| 1958 | 3.701 |
| 1959 | 3.712 |
| 1960 | 3.654 |
| 1961 | 3.629 |
| 1962 | 3.474 |
| 1963 | 3.333 |
| 1964 | 3.208 |
| 1965 | 2.928 |
| 1966 | 2.736 |
| 1967 | 2.573 |
| 1968 | 2.477 |
| 1969 | 2.465 |
| 1970 | 2.480 |
| 1971 | 2.278 |
| 1972 | 2.022 |
| 1973 | 1.902 |
| 1974 | 1.900 |
| 1975 | 1.880 |
| 1976 | 1.860 |
| 1977 | 1.870 |
| 1978 | 1.880 |
| 1979 | 1.895 |
| 1980 | 2.050 |
| 1981 | 2.100 |
| 1982 | 2.140 |
| 1983 | 2.180 |
| 1984 | 2.200 |
| 1985 | 2.300 |

Adapted from "Birthrate Drop Bodes Big Economic Changes," by Al Altwegg in *The Dallas Morning News*, June 9, 1974 ponents will continue to slowly decrease but remain above the population replacement level.

There has also been since 1965 a significant decrease in the national birth rates. Any forecast of future pupil populations, for validity and accuracy of estimate, must take into account trends and effects of birth rates. The demographic studies of this Project took note of the decline in the National birth rate from approximately 22.4 live births per 1000 of population in 1960 to 19.4 in 1965, 18.2 in 1970 (15.5 for the white cohort and 25.2 for the Black cohort), 17.3 in 1971, 15.6 for 1972, 15.3 for 1973, and estimated at 15.1 for 1974. Project demographic studies also noted that in 1968 the cumulative effect of the declining national fertility rate and birth rate was reflected in a decrease in the number of public elementary school pupils from the year before in the Nation** -- the first such decrease in National enrollments since 1940 and marking the beginning of a long term National trend toward decreasing public school enrollments. In the Project demographic studies it was assumed (1) that in respect to the 1973 "in-place" component of the total Metroplex population (and of each statistical geographic area's total population) there had been, and would be during the 1974-1985 time frame, no difference between the National and the Metroplex birth rates, both as to general or total population and as to each ethnic/racial cohort of the population, and (2) that, because in the flux of human migration there is a consistent history of the migrant population having a disproportionately higher ratio of people about to enter or already within child-bearing age than the non-migrant population, the effective fertility rate and birth rate of the MIGRANT component (the recently moved in and those projected to move into or leave) of the Metroplex projected population, as well as the MIGRANT component of the projected population in each statistical geographic area subject to forecast, will average 25 per cent above the assumed National rates for the total population and for each ethnic/racial cohort.

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** See Table 4 (p.21) of Projections of Educational Statistics to 1981-82 (1972 edition), National Center for Educational Statistics, U.S. Dept. HEW, U.S. Govt. Printing Office, 1973.

c. A third but less influential factor which affects public school pupil enrollments and which was used in the derivation of the refined forecasts of school enrollments is that of the influence of private and parochial schools in the Metroplex as a whole and in the statistical areas used in the demographic studies.

There has been no significant decrease or increase in the numbers of pupils attending private and parochial schools, taken together, in the two central counties of the Dallas-Fort Worth Metropolitan Area during the period from 1970 to 1974; but since there has been an increase in both the total population and the school age population of the area as a whole, the PERCENTAGE of the total pupil population enrolled in private and parochial schools can be considered to have declined. Actually, there has been a slight increase in privately-owned non-sectarian school enrollments (which some agencies and demographers attribute, in part, to desegregation of the public schools in the central cities but which others attribute to rising income and a quest for quality education) while there has been a very small decrease in Catholic parochial school enrollments (about enough to offset the small increase in private school enrollments) and no discernible change in other parochial school enrollments. Interviews with officials of private and parochial schools concerning future prospective enrollments led to SWEP adoption of the assumptions that (1) there may be a small increase in the percentage of school-age population absorbed into private and parochial schools in certain suburban districts where the per capita income is or will be relatively high and/or the percentage of black pupils is or will be relatively low, but such increase will not raise the PERCENTAGE of the total pupil population enrolled in private/parochial schools even in such districts by more than 5% by 1980-81 or by 1985-86, and (2) the private and parochial school enrollments in the Metroplex as a whole, and particularly in the central-city districts of the two core counties, will decrease as a percentage of the total school-age population (which some agencies and demographers attribute, in part, to desegregation of the public schools in the central cities but which others attribute to rising income and a quest for quality education) while there has been a very small decrease in Catholic parochial school enrollments (about enough to offset the small increase in private school enrollments) and no discernible change in other parochial school enrollments. Interviews with officials of private and parochial schools concerning future prospective enrollments led to SWEP adoption of the assumptions that (1) there may be a small increase in the percentage of school-age population absorbed into private and parochial schools in certain suburban districts where the per capita income is or will be relatively high and/or the percentage of black pupils is or will be relatively low, but such increase will not raise the PERCENTAGE of the total pupil population enrolled in private/parochial schools even in such districts by more than 5% by 1980-81 or by 1985-86, and (2) the private and parochial school enrollments in the Metroplex as a whole, and particularly in the central-city districts of the two core counties, will decrease as a percentage of the total school-age population but will increase slightly in absolute numbers during the period 1974 to 1986. The Addendum to Tables P-1 and P-2 furnishes a comparison of the estimated school pupil enrollments and the prospective private/parochial school enrollments for the 1980-1981 and the 1985-86 school year, as derived from SWEP demographic studies. Nevertheless, it should be stated that the refined forecasts of public school pupil enrollments for each of statistical areas, completely excluded that portion of the total pupil populations that will be expected to enroll in the private and parochial schools in the future.

Attention is called at this point to the fact that, of the influential factors cited above and which were taken into account in the refinement of pupil enrollment forecasts, one, the net in- or out-migration factor was used only indirectly to influence change in "raw" estimates of future pupil enrollments. It is a direct determinant of total population rather than of pupil enrollments. The other two influential factors cited (birth and fertility rates, and presence or accessibility of private and parochial schools) are considered to be direct reflexive determinants of future pupil populations, when the time lag between birth and entry into the school system is taken into account.

## C. Ethnic Categories of Population in The Metroplex

Inasmuch as major attention has been given in all aspects of Project demographic studies to the ethnic components of pupil population, it is appropriate at this point to present a description of the ethnic categories of pupils, their origins, and some aspects of their distribution within the southwest Metroplex. Discussed herein are, the American Indian, the Asian American, the Spanish-surnamed, the Black minority, and the "Other" (majority) ethnic categories.

The American Indian pupils' enrollments in the public schools of the Metroplex and of the two central counties has steadily increased the past four years. Examination of this increase has shown the increase to be due to two factors: (a) an influx of American Indian families principally from the states of Oklahoma, New Mexico, Arizona, Colorado, and Nevada in pursuit of employment or improved employment/business opportunities, and

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The Asian American minorities are principally those of Chinese and Japanese extraction (our studies included arbitrarily in this category some Japanese resident aliens) but this category also includes many Americans of Filipino, Korean, Indo-Chinese, Indonesian, and East Indian extraction, and some resident aliens from the Far East whose heads-of-household are here for business purposes. Many of the Chinese and Japanese-Americans are "third" and "fourth" generation Americans who have migrated into the Metroplex for a variety of reasons from the West Coast states. The SWEP demographic studies derived future estimates of the enrollments of Asian American pupils under the assumption that there would be no drastic change in the conditions which have stimulated the in-migration of Asians and Asian Americans into the Metroplex and that the rate of influx of this minority cohort would therefore continue through 1980 at the same relative level as has been in effect since 1970, and that after 1980 the proportion of Asians and Asian Americans among the total Metroplex in-migrant population would be the same as that ethnic minority is of the total National population.

The Spanish-surnamed ethnic category is made up primarily of Mexican Americans and, to some extent, both legal and illegal Mexican aliens; however, over 10% of the Spanish surnamed families in the Metroplex* in 1970 were Americans or legal resident aliens whose origins were Cuba, Puerto Rico, Panama and other South American and Carribean countries, and Spain and Spanish colonies.

Many of the Mexican Americans are "third", "fourth" and "fifth" generation Texans. The in-migrant Spanish-surnamed pupils in recent years have come from South Texas and Mexico. The SWEP estimates of future enrollments of the Spanish-surnamed pupils has been made under the assumption that the in-migration of Mexican Americans (and legal and illegal of Asians and Asian Americans into the Metroplex and that the rate of influx of this minority cohort would therefore continue through 1980 at the same relative level as has been in effect since 1970, and that after 1980 the proportion of Asians and Asian Americans among the total Metroplex in-migrant population would be the same as that ethnic minority is of the total National population.

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Many of the Mexican Americans are "third", "fourth" and "fifth" generation Texans. The in-migrant Spanish-surnamed pupils in recent years have come from South Texas and Mexico. The SWEP estimates of future enrollments of the Spanish-surnamed pupils has been made under the assumption that the in-migration of Mexican Americans (and legal and illegal Mexican aliens) will continue through 1985 at approximately the same rate as the Metroplex has experienced 1969 to 1974 but that only an insignificant number of Spanish-surnamed pupils of other national origins will be migrating into the Metroplex. Another significant assumption relative to the Mexican American in-migrants that was influential in SWEP demographic forecasts was the assumption that these in-migrants would tend to settle in the larger cities and in those suburban school districts that already have within their areas one or more visible clusters of Spanish-speaking residents or that have already a significant proportion of total population that speaks the Spanish language.

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*See Table 81 of 1970 Census of Population: General, Social and Economic Characteristics-Texas (PC-1-45-Tex), Bureau of the Census, US Dept. of Commerce.

The Black Minority forms the second largest cohort of the Metroplex population, next to the "Other" (White) majority. About half of the Black pupils in 1970 were members of families of long-standing residence in the two central cities and in a few of the suburban communities; their families were in Dallas and Tarrant counties before World War II or came to those two counties to find employment in war industries during that conflict. The other half of the Black population has migrated into the Metroplex steadily over the last 25 years primarily from Texas small towns and rural areas and to a lesser extent from similar areas of the states of the "Deep South". Only a very small percentage of new Black residents of the Metroplex have come from Midwestern, Eastern, and Western states. The increase in the Black cohort of the population of the Metroplex, like the Spanish-surnamed minority, has been the result of both extensive in-migration and a relatively high fertility rate, although the latter has been declining recently. There has been a "trickle" of migration of middle-income Black families from the central cities of Dallas and Fort Worth to surrounding areas from 1972 to the present; there are some indications, and reasons to believe, that this outflow of Black families to the suburbs will increase moderately during the next few years even though it will not be enough to offset, or even nearly offset, the gains in central city Black population that are expected from other sources.

The "Other" (Majority) category of the Metroplex population has been, as in other parts of the nation, made up almost entirely of Caucasian Americans moving from other states and whose forebears immigrated long ago to the United States from Europe. However, a small but significant part of the annual in-migrant component since World War II has been of of the Metroplex have come from Midwestern, Eastern, and Western states. The increase in the Black cohort of the population of the Metroplex, like the Spanish-surnamed minority, has been the result of both extensive in-migration and a relatively high fertility rate, although the latter has been declining recently. There has been a "trickle" of migration of middle-income Black families from the central cities of Dallas and Fort Worth to surrounding areas from 1972 to the present; there are some indications, and reasons to believe, that this outflow of Black families to the suburbs will increase moderately during the next few years even though it will not be enough to offset, or even nearly offset, the gains in central city Black population that are expected from other sources.

The "Other" (Majority) category of the Metroplex population has been, as in other parts of the nation, made up almost entirely of Caucasian Americans moving from other states and whose forebears immigrated long ago to the United States from Europe. However, a small but significant part of the annual in-migrant component since World War II has been of families coming directly here from Canada, Australia, Europe, and the Mediterranean countries. Some parts of the Metroplex have received fewer in-migrants of this "Other" (White) category than have others. Furthermore, over the past three years there has been a net out-migration of the "White" majority component of the populations from the two central cities; so that during that time the result has been that in both Dallas and Fort Worth public school enrollments of pupils of the White ethnic majority have decreased in numbers and as a percent of total enrollments *while the opposite has been the trend in the suburbs*. SWEP demographic studies have taken this trend into account, but with due notice being accorded to the fact that there was some slowing during the 1973-74 school year. Consequently, SWEP forecasts of pupil enrollments have been predicated on the assumption that the trend of decreasing numbers of *ethnic majority* families in the central cities has about run its course and that a reversal of the trend will occur at some time between 1975 and 1978.

## D. The Refined Estimates of Future Pupil Enrollments

In this section, the SWEP refined estimates of the future pupil enrollments for each of the geographic statistical areas for the school years 1980-81 and 1985-86 are presented. It is believed that these refined forecasts of pupil enrollments will enable decision makers to determine, after the various legal and political constraints are taken into account, which of the various alternative locations for the Project-resultant school will yield a prospective pupil population, in respect to the ethnicity and socio-economic background of pupils, that will satisfy all Project numeric and ethnic demographic requirements. These estimates, with the data provided in the following section (socio-economic indicators) will permit the formulation or aggregation of a prospective geographic attendance area for the Model of the Project-resultant school such that the enrollment of resident pupils from within the determined area will have the required ethnic and socio-economic background ratios. This demographic information will, of course, have much less value if it is decided to draw the prospective pupil enrollment for the Project-resultant secondary school from a very large geographic area ("all-district" or "all-county", etc.) on a selective enrollments for each of the geographic statistical areas for the school years 1980-81 and 1985-86 are presented. It is believed that these refined forecasts of pupil enrollments will enable decision makers to determine, after the various legal and political constraints are taken into account, which of the various alternative locations for the Project-resultant school will yield a prospective pupil population, in respect to the ethnicity and socio-economic background of pupils, that will satisfy all Project numeric and ethnic demographic requirements. These estimates, with the data provided in the following section (socio-economic indicators) will permit the formulation or aggregation of a prospective geographic attendance area for the Model of the Project-resultant school such that the enrollment of resident pupils from within the determined area will have the required ethnic and socio-economic background ratios. This demographic information will, of course, have much less value if it is decided to draw the prospective pupil enrollment for the Project-resultant secondary school from a very large geographic area ("all-district" or "all-county", etc.) on a selective admissions basis to fulfill low-frequency educational needs of pupils with unusual handicaps, propensities, aptitudes, and/or academic talents.

In Table P-1 are presented the refined estimates of all school-age pupils, except those who are expected to attend private/parochial schools, who will be residing in the respective geographic areas of the two central counties of the Dallas-Fort Worth Metroplex for the school years 1980-81 and 1985-86. Note that because separate projections were calculated for each of the ethnic categories and the "totals", the "TOTALs" are not, except by coincidence, the arithmetic sum of the component categories, in this Table and following Tables.

### TABLE P-1

### REFINED PUBLIC SCHOOL ENROLLMENT ESTIMATES

"Most Likely" Enrollments
for Grades K-12

DALLAS COUNTY

| GEOGRAPHIC STATISTICAL PUPIL RESIDENCE AREA | PUPIL ETHNIC CATEGORY | ENROLLMENTS FOR SCHOOL YEAR 1980-1981* | ENROLLMENTS FOR SCHOOL YEAR 1985-1986** |
|---|---|---|---|
| #1<br>Turner H.S.<br>(Carrollton-Farmers Branch ISD) | Am. Ind. | 104 | 120 |
| | Black | 60 | 72 |
| | Asian | 44 | 52 |
| | Span. Surn. | 1600 | 1904 |
| | Other | 14340 | 16000 |
| | TOTAL | 16148 | 18148 |
| #2<br>Cedar Hill H.S.<br>(Cedar Hill ISD) | Am. Ind. | 1 | 1 |
| | Black | 40 | 44 |
| | Asian | 10 | 12 |
| | Span. Surn. | 144 | 180 |
| | Other | 2260 | 2800 |
| | TOTAL | 2455 | 3037 |
| #3<br>Coppell H.S.<br>(Coppell ISD) | Am. Ind. | 4 | 4 |
| | Black | 4 | 8 |
| | Asian | 3 | 4 |
| | Span. Surn. | 44 | 60 |
| | Other | 600 | 820 |
| | TOTAL | 657 | 896 |
| #I<br>Hillcrest, White, Jefferson H.S.<br>(Dallas ISD) | Am. Ind. | 50 | 60 |
| | Black | 3500 | 4400 |
| | Asian | 130 | 160 |
| | Span. Surn. | 1260 | 1800 |
| | Other | 16960 | 19000 |
| | TOTAL | 21900 | 24020 |
| #II<br>Adamson, Sunset H.S.<br>(Dallas ISD) | Am. Ind. | 180 | 196 |
| | Black | 1100 | 1400 |
| | Asian | 30 | 40 |
| | Span. Surn. | 4680 | 5500 |
| | Other | 7400 | 7800 |
| | TOTAL | 13390 | 14936 |
| #III<br>Carter, Kimball H.S.<br>(Dallas ISD) | Am. Ind. | 25 | 30 |
| | Black | 6200 | 7200 |
| | Asian | 50 | 56 |
| | Span. Surn. | 1100 | 1400 |

|  |  |  |  |
|---|---|---|---|
| #1 | Am. Ind. | 104 | 120 |
| Turner H.S. | Black | 60 | 72 |
| (Carrollton- | Asian | 44 | 52 |
| Farmers Branch | Span. Surn. | 1600 | 1904 |
| ISD) | Other | 14340 | 16000 |
|  | TOTAL | 16148 | 18148 |
| #2 | Am. Ind. | 1 | 1 |
| Cedar Hill | Black | 40 | 44 |
| H.S. | Asian | 10 | 12 |
| (Cedar Hill | Span. Surn. | 144 | 180 |
| ISD) | Other | 2260 | 2800 |
|  | TOTAL | 2455 | 3037 |
| #3 | Am. Ind. | 4 | 4 |
| Coppell | Black | 4 | 8 |
| H.S. | Asian | 3 | 4 |
| (Coppell | Span. Surn. | 44 | 60 |
| ISD) | Other | 600 | 820 |
|  | TOTAL | 657 | 896 |
| #I | Am. Ind. | 50 | 60 |
| Hillcrest, | Black | 3500 | 4400 |
| White, | Asian | 130 | 160 |
| Jefferson | Span. Surn. | 1260 | 1800 |
| H.S. | Other | 16960 | 19000 |
| (Dallas ISD) | TOTAL | 21900 | 24020 |
| #II | Am. Ind. | 180 | 196 |
| Adamson, | Black | 1100 | 1400 |
| Sunset H.S. | Asian | 30 | 40 |
| (Dallas ISD) | Span. Surn. | 4680 | 5500 |
|  | Other | 7400 | 7800 |
|  | TOTAL | 13390 | 14936 |
| #III | Am. Ind. | 25 | 30 |
| Carter, | Black | 6200 | 7200 |
| Kimball H.S. | Asian | 50 | 56 |
| (Dallas ISD) | Span. Surn. | 1100 | 1400 |
|  | Other | 7000 | 8000 |
|  | TOTAL | 14375 | 16056 |
| #IV | Am. Ind. | 41 | 50 |
| Adams | Black | 1100 | 1200 |
| H.S. | Asian | 55 | 70 |
| (Dallas ISD) | Span. Surn. | 800 | 1200 |
|  | Other | 10100 | 11300 |
|  | TOTAL | 12096 | 13820 |

| GEOGRAPHIC STATISTICAL PUPIL RESIDENCE AREA | PUPIL ETHNIC CATEGORY | ENROLLMENTS FOR SCHOOL YEAR 1980-1981* | ENROLLMENTS FOR SCHOOL YEAR 1985-1986** |
|---|---|---|---|
| #V | Am. Ind. | 70 | 80 |
| Samuell, | Black | 5360 | 6600 |
| Skyline | Asian | 39 | 48 |
| H.S. | Span. Surn. | 2200 | 2800 |
| (Dallas ISD) | Other | 17000 | 18000 |
| | TOTAL | 24669 | 26528 |
| #VI | Am. Ind. | 10 | 15 |
| Seagoville | Black | 640 | 800 |
| H.S. | Asian | 10 | 15 |
| (Dallas ISD) | Span. Surn. | 300 | 800 |
| | Other | 2880 | 3700 |
| | TOTAL | 3820 | 5330 |
| #VII | Am. Ind. | 105 | 120 |
| Lincoln | Black | 14300 | 14380 |
| North Dallas | Asian | 100 | 120 |
| Wilson | Span. Surn. | 6300 | 6500 |
| H.S. | Other | 4000 | 3900 |
| (Dallas ISD) | TOTAL | 24600 | 25020 |
| #VIII | Am. Ind. | 60 | 65 |
| So. Oak Cliff | Black | 34580 | 36325 |
| Roosevelt | Asian | 100 | 120 |
| Pinkston H.S. | Span. Surn. | 3700 | 3900 |
| (Dallas ISD) | Other | 600 | 600 |
| | TOTAL | 38947 | 40900 |
| #4 | Am. Ind. | 8 | 12 |
| DeSoto H.S. | Black | 36 | 80 |
| (DeSoto ISD) | Asian | 10 | 16 |
| | Span. Surn. | 150 | 200 |
| | Other | 5600 | 10200 |
| | TOTAL | 5804 | 10508 |
| #5 | Am. Ind. | 60 | 70 |
| Duncanville | Black | 100 | 120 |
| H.S. | Asian | 40 | 42 |
| (Duncanville ISD) | Span. Surn. | 300 | 360 |
| | Other | 10380 | 12200 |
| | TOTAL | 10880 | 12800 |
| #6 | Am. Ind. | 36 | 40 |
| Garland H.S. | Black | 2400 | 2700 |
| (Garland ISD) | Asian | 6 | 8 |
| | Span. Surn. | 870 | 1000 |
| | Other | 3680 | 4320 |
| | TOTAL | 6992 | 8068 |
| #7 | Am. Ind. | 50 | 56 |
| No. Garland | Black | 48 | 64 |
| H.S. | Asian | 20 | 28 |
| (Garland ISD) | Span. Surn. | 640 | 760 |
| | Other | 9000 | 10600 |
| | TOTAL | 9758 | 11508 |
| #8 | Am. Ind. | 30 | 36 |
| So. Garland H.S. | Black | 300 | 360 |
| (Garland ISD) | Asian | 18 | 20 |
| | Span. Surn. | 700 | 840 |
| | Other | 11700 | 14000 |
| | TOTAL | 12728 | 15156 |
| #9 | Am. Ind. | 72 | 84 |
| Grand Prairie | Black | 532 | 628 |

|  |  |  |  |
|---|---|---|---|
|  | TOTAL | 38947 | 40900 |
| #4<br>DeSoto H.S. (DeSoto ISD) | Am. Ind. | 8 | 12 |
|  | Black | 36 | 80 |
|  | Asian | 10 | 16 |
|  | Span. Surn. | 150 | 200 |
|  | Other | 5600 | 10200 |
|  | TOTAL | 5804 | 10508 |
| #5<br>Duncanville H.S. (Duncanville ISD) | Am. Ind. | 60 | 70 |
|  | Black | 100 | 120 |
|  | Asian | 40 | 42 |
|  | Span. Surn. | 300 | 360 |
|  | Other | 10380 | 12200 |
|  | TOTAL | 10880 | 12800 |
| #6<br>Garland H.S. (Garland ISD) | Am. Ind. | 36 | 40 |
|  | Black | 2400 | 2700 |
|  | Asian | 6 | 8 |
|  | Span. Surn. | 870 | 1000 |
|  | Other | 3680 | 4320 |
|  | TOTAL | 6992 | 8068 |
| #7<br>No. Garland H.S. (Garland ISD) | Am. Ind. | 50 | 56 |
|  | Black | 48 | 64 |
|  | Asian | 20 | 28 |
|  | Span. Surn. | 640 | 760 |
|  | Other | 9000 | 10600 |
|  | TOTAL | 9758 | 11508 |
| #8<br>So. Garland H.S. (Garland ISD) | Am. Ind. | 30 | 36 |
|  | Black | 300 | 360 |
|  | Asian | 18 | 20 |
|  | Span. Surn. | 700 | 840 |
|  | Other | 11700 | 14000 |
|  | TOTAL | 12728 | 15156 |
| #9<br>Grand Prairie H.S. (Grand Prairie ISD) | Am. Ind. | 72 | 84 |
|  | Black | 532 | 628 |
|  | Asian | 32 | 40 |
|  | Span. Surn. | 1420 | 1700 |
|  | Other | 6400 | 7300 |
|  | TOTAL | 8456 | 9752 |
| #10<br>So. Grand Prairie H.S. (Grand Prairie ISD) | Am. Ind. | 52 | 60 |
|  | Black | 240 | 300 |
|  | Asian | 48 | 52 |
|  | Span. Surn. | 1200 | 1440 |
|  | Other | 7200 | 8400 |
|  | TOTAL | 8740 | 10252 |

| GEOGRAPHIC STATISTICAL PUPIL RESIDENCE AREA | PUPIL ETHNIC CATEGORY | ENROLLMENTS FOR SCHOOL YEAR 1980-1981* | ENROLLMENTS FOR SCHOOL YEAR 1985-1986** |
|---|---|---|---|
| #11<br>Highland Park H.S.<br>(Highland Park ISD) | Am. Ind. | 3 | 5 |
| | Black | 4 | 10 |
| | Asian | 20 | 28 |
| | Span. Surn. | 28 | 40 |
| | Other | 3600 | 3500 |
| | TOTAL | 3655 | 3583 |
| #12<br>Irving H.S.<br>(Irving ISD) | Am. Ind. | 100 | 120 |
| | Black | 280 | 300 |
| | Asian | 24 | 32 |
| | Span. Surn. | 1000 | 1280 |
| | Other | 9000 | 9600 |
| | TOTAL | 10404 | 11332 |
| #13<br>McArthur H.S.<br>(Irving ISD) | Am. Ind. | 36 | 40 |
| | Black | 32 | 40 |
| | Asian | 24 | 30 |
| | Span. Surn. | 420 | 640 |
| | Other | 7680 | 9200 |
| | TOTAL | 8192 | 9950 |
| #14<br>Nimitz H.S.<br>(Irving ISD) | Am. Ind. | 124 | 132 |
| | Black | 180 | 200 |
| | Asian | 28 | 36 |
| | Span. Surn. | 1120 | 1500 |
| | Other | 9628 | 11200 |
| | TOTAL | 11080 | 13168 |
| #15<br>Lancaster H.S.<br>(Lancaster ISD) | Am. Ind. | 5 | 7 |
| | Black | 150 | 160 |
| | Asian | 3 | 4 |
| | Span. Surn. | 165 | 200 |
| | Other | 2800 | 3100 |
| | TOTAL | 3123 | 3471 |
| #16<br>Mesquite H.S.<br>(Mesquite ISD) | Am. Ind. | 52 | 56 |
| | Black | 44 | 52 |
| | Asian | 8 | 10 |
| | Span. Surn. | 960 | 1144 |
| | Other | 13480 | 16000 |
| | TOTAL | 14544 | 17262 |
| #17<br>N. Mesquite H.S.<br>(Mesquite ISD) | Am. Ind. | 12 | 16 |
| | Black | 56 | 68 |
| | Asian | 12 | 14 |
| | Span. Surn. | 720 | 880 |
| | Other | 10640 | 12680 |
| | TOTAL | 11440 | 13658 |
| #18<br>Richardson H.S.<br>(Richardson ISD) | Am. Ind. | 20 | 28 |
| | Black | 360 | 440 |
| | Asian | 44 | 56 |
| | Span. Surn. | 372 | 448 |
| | Other | 11160 | 11496 |
| | TOTAL | 11956 | 12468 |
| #19<br>Pearce H.S.<br>(Richardson ISD) | Am. Ind. | 16 | 20 |
| | Black | 280 | 360 |
| | Asian | 36 | 48 |
| | Span. Surn. | 472 | 560 |
| | Other | 9280 | 11000 |
| | TOTAL | 10084 | 11988 |
| #20<br>Lake Highlands | Am. Ind. | 76 | 88 |
| | Black | 688 | 816 |

|  |  |  |  |
|---|---|---|---|
|  | TOTAL | 11080 | 13168 |
| #15<br>Lancaster H.S.<br>(Lancaster ISD) | Am. Ind. | 5 | 7 |
|  | Black | 150 | 160 |
|  | Asian | 3 | 4 |
|  | Span. Surn. | 165 | 200 |
|  | Other | 2800 | 3100 |
|  | TOTAL | 3123 | 3471 |
| #16<br>Mesquite H.S.<br>(Mesquite ISD) | Am. Ind. | 52 | 56 |
|  | Black | 44 | 52 |
|  | Asian | 8 | 10 |
|  | Span. Surn. | 960 | 1144 |
|  | Other | 13480 | 16000 |
|  | TOTAL | 14544 | 17262 |
| #17<br>N. Mesquite H.S.<br>(Mesquite ISD) | Am. Ind. | 12 | 16 |
|  | Black | 56 | 68 |
|  | Asian | 12 | 14 |
|  | Span. Surn. | 720 | 880 |
|  | Other | 10640 | 12680 |
|  | TOTAL | 11440 | 13658 |
| #18<br>Richardson H.S.<br>(Richardson ISD) | Am. Ind. | 20 | 28 |
|  | Black | 360 | 440 |
|  | Asian | 44 | 56 |
|  | Span. Surn. | 372 | 448 |
|  | Other | 11160 | 11496 |
|  | TOTAL | 11956 | 12468 |
| #19<br>Pearce H.S.<br>(Richardson ISD) | Am. Ind. | 16 | 20 |
|  | Black | 280 | 360 |
|  | Asian | 36 | 48 |
|  | Span. Surn. | 472 | 560 |
|  | Other | 9280 | 11000 |
|  | TOTAL | 10084 | 11988 |
| #20<br>Lake Highlands H.S.<br>(Richardson ISD) | Am. Ind. | 76 | 88 |
|  | Black | 688 | 816 |
|  | Asian | 40 | 44 |
|  | Span. Surn. | 448 | 532 |
|  | Other | 11000 | 12000 |
|  | TOTAL | 12252 | 13280 |
| #21<br>Berkner H.S.<br>(Richardson ISD) | Am. Ind. | 16 | 20 |
|  | Black | 280 | 320 |
|  | Asian | 40 | 48 |
|  | Span. Surn. | 468 | 556 |
|  | Other | 9288 | 12040 |
|  | TOTAL | 10092 | 13184 |

| GEOGRAPHICAL STATISTICAL PUPIL RESIDENCE AREA | PUPIL ETHNIC CATEGORY | ENROLLMENTS FOR SCHOOL YEAR 1980-1981* | | ENROLLMENTS FOR SCHOOL YEAR 1985-1986** |
|---|---|---|---|---|
| #22 | Am. Ind. | 0 | E | 0 |
| Sunnyvale ISD | Black | 0 | L O | 0 |
| | Asian | 0 | E N | 0 |
| | Span. Surn. | 3 | M. L | 3 |
| | Other | 220 | Y | 240 |
| | TOTAL | 223 | | 243 |
| #23 | Am. Ind. | 1 | | 1 |
| Wilmer-Hutchings H.S. | Black | 8932 | | 10600 |
| (Wilmer-Hutchins ISD) | Asian | 1 | | 1 |
| | Span. Surn. | 220 | | 268 |
| | Other | 128 | | 112 |
| | TOTAL | 9282 | | 10900 |

--------TARRANT COUNTY--------

| GEOGRAPHIC STATISTICAL PUPIL RESIDENCE AREA | PUPIL ETHNIC CATEGORY | ENROLLMENTS FOR SCHOOL YEAR 1980-1981* | ENROLLMENTS FOR SCHOOL YEAR 1985-1986** |
|---|---|---|---|
| #24 | Am. Ind. | 4 | 8 |
| Arlington H.S. | Black | 16 | 32 |
| (Arlington | Asian | 18 | 20 |
| ISD) | Span. Surn. | 184 | 260 |
| | Other | 6500 | 7400 |
| | TOTAL | 6722 | 7720 |
| #25 | Am. Ind. | 24 | 28 |
| Houston H.S. | Black | 420 | 460 |
| (Arlington | Asian | 8 | 12 |
| ISD) | Span. Surn. | 424 | 480 |
| | Other | 8600 | 8888 |
| | TOTAL | 9476 | 9868 |
| #26 | Am. Ind. | 8 | 12 |
| Lamar H.S. | Black | 132 | 180 |
| (Arlington | Asian | 24 | 28 |
| ISD) | Span. Surn. | 368 | 400 |
| | Other | 6100 | 6680 |
| | TOTAL | 6632 | 7300 |
| #27 | Am. Ind. | 6 | 8 |
| Bowie H.S. | Black | 20 | 28 |
| (Arlington ISD) | Asian | 8 | 16 |
| | Span. Surn. | 160 | 224 |
| | Other | 6532 | 6900 |
| | TOTAL | 6726 | 7176 |
| #28 | Am. Ind. | 12 | 12 |
| Azle H.S. | Black | 12 | 16 |
| (Azle ISD) | Asian | 8 | 12 |
| | Span. Surn. | 48 | 52 |
| | Other | 3600 | 4092 |
| | TOTAL | 3680 | 4188 |
| #29 | Am. Ind. | 28 | 36 |
| Haltom City | Black | 48 | 56 |
| H.S. | Asian | 4 | 8 |
| (Birdville ISD) | Span. Surn. | 400 | 480 |
| | Other | 9500 | 10400 |
| | TOTAL | 9980 | 10980 |
| #30 | Am. Ind. | 4 | 4 |
| Richland H.S | Black | 8 | 12 |

| | | | |
|---|---|---|---|
| ISD) | Span. Surn. | 184 | 260 |
| | Other | 6500 | 7400 |
| | TOTAL | 6722 | 7720 |
| #25 | Am. Ind. | 24 | 28 |
| Houston H.S. | Black | 420 | 460 |
| (Arlington | Asian | 8 | 12 |
| ISD) | Span. Surn. | 424 | 480 |
| | Other | 8600 | 8888 |
| | TOTAL | 9476 | 9868 |
| #26 | Am. Ind. | 8 | 12 |
| Lamar H.S. | Black | 132 | 180 |
| (Arlington | Asian | 24 | 28 |
| ISD) | Span. Surn. | 368 | 400 |
| | Other | 6100 | 6680 |
| | TOTAL | 6632 | 7300 |
| #27 | Am. Ind. | 6 | 8 |
| Bowie H.S. | Black | 20 | 28 |
| (Arlington ISD) | Asian | 8 | 16 |
| | Span. Surn. | 160 | 224 |
| | Other | 6532 | 6900 |
| | TOTAL | 6726 | 7176 |
| #28 | Am. Ind. | 12 | 12 |
| Azle H.S. | Black | 12 | 16 |
| (Azle ISD) | Asian | 8 | 12 |
| | Span. Surn. | 48 | 52 |
| | Other | 3600 | 4092 |
| | TOTAL | 3680 | 4188 |
| #29 | Am. Ind. | 28 | 36 |
| Haltom City | Black | 48 | 56 |
| H.S. | Asian | 4 | 8 |
| (Birdville ISD) | Span. Surn. | 400 | 480 |
| | Other | 9500 | 10400 |
| | TOTAL | 9980 | 10980 |
| #30 | Am. Ind. | 4 | 4 |
| Richland H.S. | Black | 8 | 12 |
| (Birdville ISD) | Asian | 16 | 24 |
| | Span. Surn. | 192 | 228 |
| | Other | 7780 | 8900 |
| | TOTAL | 8000 | 9168 |

| GEOGRAPHIC STATISTICAL PUPIL RESIDENCE AREA | PUPIL ETHNIC CATEGORY | ENROLLMENTS FOR SCHOOL YEAR 1980-1981* | ENROLLMENTS FOR SCHOOL YEAR 1985-1986** |
|---|---|---|---|
| #31<br>Carroll H.S.<br>(Carroll ISD) | Am. Ind. | 1 | 4 |
| | Black | 4 | 8 |
| | Asian | 4 | 4 |
| | Span. Surn. | 40 | 48 |
| | Other | 700 | 820 |
| | TOTAL | 749 | 884 |
| #32<br>Castleberry H.S.<br>(Castleberry ISD) | Am. Ind. | 12 | 16 |
| | Black | 80 | 96 |
| | Asian | 20 | 24 |
| | Span. Surn. | 360 | 480 |
| | Other | 3900 | 4600 |
| | TOTAL | 4372 | 5216 |
| #33<br>Crowley H.S.<br>(Crowley ISD) | Am. Ind. | 8 | 8 |
| | Black | 16 | 20 |
| | Asian | 4 | 4 |
| | Span. Surn. | 360 | 420 |
| | Other | 3796 | 4560 |
| | TOTAL | 4184 | 5012 |
| #34<br>Boswell H.S.<br>(Eagle Mountain-Saginaw ISD) | Am. Ind. | 4 | 8 |
| | Black | 4 | 8 |
| | Asian | 0 | 4 |
| | Span. Surn. | 320 | 380 |
| | Other | 2960 | 3400 |
| | TOTAL | 3288 | 3800 |
| #35<br>Everman H.S.<br>(Everman ISD) | Am. Ind. | 4 | 8 |
| | Black | 740 | 860 |
| | Asian | 0 | 0 |
| | Span. Surn. | 420 | 520 |
| | Other | 3260 | 3620 |
| | TOTAL | 4424 | 5008 |
| #IX<br>Eastern Hills H.S.<br>(Fort Worth ISD) | Am. Ind. | 11 | 12 |
| | Black | 1930 | 2124 |
| | Asian | 12 | 13 |
| | Span. Surn. | 88 | 124 |
| | Other | 4642 | 5270 |
| | TOTAL | 6683 | 7543 |
| #X<br>Polytechnic, Wyatt, Dunbar H.S.<br>(Fort Worth ISD) | Am. Ind. | 18 | 20 |
| | Black | 11160 | 11376 |
| | Asian | 6 | 10 |
| | Span. Surn. | 1270 | 1464 |
| | Other | 6481 | 7090 |
| | TOTAL | 18924 | 19684 |
| #XI<br>Southwest, Paschal H.S.<br>(Fort Worth ISD) | Am. Ind. | 20 | 28 |
| | Black | 6850 | 6980 |
| | Asian | 24 | 32 |
| | Span. Surn. | 2734 | 2894 |
| | Other | 13003 | 13275 |
| | TOTAL | 22631 | 23209 |
| #XII<br>Arlington Hts. Western Hills H.S.<br>(Fort Worth ISD) | Am. Ind. | 36 | 41 |
| | Black | 3600 | 3780 |
| | Asian | 62 | 64 |
| | Span. Surn. | 784 | 880 |
| | Other | 12913 | 13409 |
| | TOTAL | 17395 | 18174 |
| #XIII | Am. Ind. | 17 | 20 |

| | | | |
|---|---|---|---|
| Saginaw ISD) | Span. Surn. | 320 | 380 |
| | Other | 2960 | 3400 |
| | TOTAL | 3288 | 3800 |
| #35 | Am. Ind. | 4 | 8 |
| Everman H.S. | Black | 740 | 860 |
| (Everman ISD) | Asian | 0 | 0 |
| | Span. Surn. | 420 | 520 |
| | Other | 3260 | 3620 |
| | TOTAL | 4424 | 5008 |
| #IX | Am. Ind. | 11 | 12 |
| Eastern Hills | Black | 1930 | 2124 |
| H.S. | Asian | 12 | 13 |
| (Fort Worth ISD) | Span. Surn. | 88 | 124 |
| | Other | 4642 | 5270 |
| | TOTAL | 6683 | 7543 |
| #X | Am. Ind. | 18 | 20 |
| Polytechnic, | Black | 11160 | 11376 |
| Wyatt, Dunbar | Asian | 6 | 10 |
| H.S. | Span. Surn. | 1270 | 1464 |
| (Fort Worth ISD) | Other | 6481 | 7090 |
| | TOTAL | 18924 | 19684 |
| #XI | Am. Ind. | 20 | 28 |
| Southwest, | Black | 6850 | 6980 |
| Paschal H.S. | Asian | 24 | 32 |
| (Fort Worth ISD) | Span. Surn. | 2734 | 2894 |
| | Other | 13003 | 13275 |
| | TOTAL | 22631 | 23209 |
| #XII | Am. Ind. | 36 | 41 |
| Arlington Hts. | Black | 3600 | 3780 |
| Western Hills H.S. | Asian | 62 | 64 |
| (Fort Worth ISD) | Span. Surn. | 784 | 880 |
| | Other | 12913 | 13409 |
| | TOTAL | 17395 | 18174 |
| #XIII | Am. Ind. | 17 | 20 |
| Northside, Carter- | Black | 3274 | 3596 |
| Riverside, Diamond | Asian | 18 | 21 |
| Hill H. S. | Span. Surn. | 4040 | 4330 |
| (Fort Worth ISD) | Other | 4746 | 5053 |
| | TOTAL | 12095 | 13020 |

| GEOGRAPHIC STATISTICAL PUPIL RESIDENCE AREA | PUPIL ETHNIC CATEGORY | ENROLLMENTS FOR SCHOOL YEAR 1980-1981* | ENROLLMENTS FOR SCHOOL YEAR 1985-1986** |
|---|---|---|---|
| #36 Grapevine H.S. (Grapevine ISD) | Am. Ind. | 4 | 8 |
| | Black | 60 | 72 |
| | Asian | 4 | 4 |
| | Span. Surn. | 252 | 296 |
| | Other | 3960 | 4488 |
| | TOTAL | 4280 | 4868 |
| #37 Bell H.S. (Hurst-Euless-Bedford ISD) | Am. Ind. | 88 | 92 |
| | Black | 12 | 16 |
| | Asian | 16 | 20 |
| | Span. Surn. | 196 | 228 |
| | Other | 9100 | 10680 |
| | TOTAL | 9412 | 11036 |
| #38 Trinity H.S. (Hurst-Euless-Bedford ISD) | Am. Ind. | 40 | 44 |
| | Black | 104 | 116 |
| | Asian | 8 | 16 |
| | Span. Surn. | 400 | 468 |
| | Other | 10600 | 12600 |
| | TOTAL | 11152 | 13244 |
| #39 Keller H.S. (Keller ISD) | Am. Ind. | 0 | 0 |
| | Black | 4 | 8 |
| | Asian | 0 | 0 |
| | Span. Surn. | 12 | 16 |
| | Other | 3000 | 3380 |
| | TOTAL | 3016 | 3404 |
| #40 Kennedale H.S. (Kennedale ISD) | Am. Ind. | 4 | 4 |
| | Black | 0 | 4 |
| | Asian | 0 | 4 |
| | Span. Surn. | 40 | 44 |
| | Other | 900 | 1060 |
| | TOTAL | 944 | 1116 |
| #41 Lake Worth H.S. (Lake Worth ISD) | Am. Ind. | 0 | 4 |
| | Black | 8 | 8 |
| | Asian | 8 | 8 |
| | Span. Surn. | 84 | 100 |
| | Other | 1516 | 1920 |
| | TOTAL | 1616 | 2040 |
| #42 Mansfield H.S. (Mansfield ISD) | Am. Ind. | 8 | 8 |
| | Black | 428 | 512 |
| | Asian | 0 | 4 |
| | Span. Surn. | 88 | 104 |
| | Other | 3584 | 4260 |
| | TOTAL | 4108 | 4888 |
| #43 Brewer H.S. (White Settlement ISD) | Am. Ind. | 8 | 8 |
| | Black | 12 | 16 |
| | Asian | 4 | 8 |
| | Span. Surn. | 100 | 112 |
| | Other | 3200 | 3800 |
| | TOTAL | 3324 | 3944 |

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*In interpreting the figures in this column, apply an error of estimate of ± 5% for numbers 1 to 40, ± 4% for numbers 41-100 ± 3.5% for numbers 101 to 499, and ± 3% for numbers 500 and over.

**In interpreting the figures in this column, apply an error of estimate of ± 7% for numbers 1 to 40, ± 6% for numbers 41 to 100

| | | | |
|---|---|---|---|
| | Span. Surn. | 12 | [illegible] |
| | Other | 3000 | 3380 |
| | TOTAL | 3016 | 3404 |
| #40<br>Kennedale H.S.<br>(Kennedale ISD) | Am. Ind. | 4 | 4 |
| | Black | 0 | 4 |
| | Asian | 0 | 4 |
| | Span. Surn. | 40 | 44 |
| | Other | 900 | 1060 |
| | TOTAL | 944 | 1116 |
| #41<br>Lake Worth H.S.<br>(Lake Worth ISD) | Am. Ind. | 0 | 4 |
| | Black | 8 | 8 |
| | Asian | 8 | 8 |
| | Span. Surn. | 84 | 100 |
| | Other | 1516 | 1920 |
| | TOTAL | 1616 | 2040 |
| #42<br>Mansfield H.S.<br>(Mansfield ISD) | Am. Ind. | 8 | 8 |
| | Black | 428 | 512 |
| | Asian | 0 | 4 |
| | Span. Surn. | 88 | 104 |
| | Other | 3584 | 4260 |
| | TOTAL | 4108 | 4888 |
| #43<br>Brewer H.S.<br>(White Settlement ISD) | Am. Ind. | 8 | 8 |
| | Black | 12 | 16 |
| | Asian | 4 | 8 |
| | Span. Surn. | 100 | 112 |
| | Other | 3200 | 3800 |
| | TOTAL | 3324 | 3944 |

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*In interpreting the figures in this column, apply an error of estimate of ± 5% for numbers 1 to 40, ± 4% for numbers 41-100 ± 3.5% for numbers 101 to 499, and ± 3% for numbers 500 and over.

**In interpreting the figures in this column, apply an error of estimate of ± 7% for numbers 1 to 40, ± 6% for numbers 41 to 100, ± 5.5% for numbers 101 and over.

Special Note: It is also important, in interpreting the figures in this table, to keep in mind that the figures shown represent the total number of public school enrollees who are expected to be residing in the respective geographic areas; they are NOT the number of prospective enrollees for any particular school of the future.

For a summary of the forecasts of enrollees for Grades K-12, see Addendum To Tables P-1 and P-2 following Table P-2.

Table P-2 shows the net number of resident pupils, in toto and for each racial/ethnic category, that are expected to be available for enrollment in secondary-level programs in the public schools of each of the Project delineated geographic attendance areas (expected enrollments for private/parochial schools having been "refined out" of total pupil populations). Special attention of those who may wish to use the forecasts presented in Tables P-1 and P-2 in planning future school programs and/or facilities is invited to two precautions which should be observed in such usage: (a) to take into account the probable errors of estimate that are shown as footnotes to the two tables, and (b) to take into account any major population-influencing event which may occur subsequent to the completion of the demographic studies of this Project but prior to completion of any plans based upon these forecasts; such as, the establishment of a new, very large-scale manufacturing or processing plant that will employ thousands of people, or the closing of an existent such plant, or a new Federal court order mandating county-wide consolidation of school districts for desegregation/integration purposes, or announcement of a new superhighway through residential areas.

TABLE P-2

REFINED PUBLIC SCHOOL ENROLLMENT ESTIMATES

ENROLLMENT GRADES 9-12

DALLAS COUNTY

| GEOGRAPHICAL STATISTICAL PUPIL RESIDENCE AREA | PUPIL ETHNIC CATEGORY | ENROLLMENTS FOR SCHOOL YEAR 1980-1981* | ENROLLMENTS FOR SCHOOL YEAR 1985-1986** |
|---|---|---|---|
| #1<br>Turner H.S.<br>(Carrollton-Farmers Branch ISD) | Am. Ind. | 29 | 33 |
| | Black | 16 | 20 |
| | Asian | 13 | 14 |
| | Span. Surn. | 440 | 523 |
| | Other | 3944 | 4400 |
| | TOTAL | 4540 | 5190 |
| #2<br>Cedar Hill H.S.<br>(Cedar Hill ISD) | Am. Ind. | 1 | 1 |
| | Black | 11 | 12 |
| | Asian | 2 | 3 |
| | Span. Surn. | 40 | 50 |
| | Other | 622 | 770 |
| | TOTAL | | |

plant that will employ thousands of people, or the closing of an existent such plant, or a new Federal court order mandating county-wide consolidation of school districts for desegregation/integration purposes, or announcement of a new superhighway through residential areas.

### TABLE P-2

### REFINED PUBLIC SCHOOL ENROLLMENT ESTIMATES

### ENROLLMENT GRADES 9-12

### DALLAS COUNTY

| GEOGRAPHICAL STATISTICAL PUPIL RESIDENCE AREA | PUPIL ETHNIC CATEGORY | ENROLLMENTS FOR SCHOOL YEAR 1980-1981* | ENROLLMENTS FOR SCHOOL YEAR 1985-1986** |
|---|---|---|---|
| #1<br>Turner H.S.<br>(Carrollton-Farmers Branch ISD) | Am. Ind. | 29 | 33 |
| | Black | 16 | 20 |
| | Asian | 13 | 14 |
| | Span. Surn. | 440 | 523 |
| | Other | 3944 | 4400 |
| | TOTAL | 4540 | 5190 |
| #2<br>Cedar Hill H.S.<br>(Cedar Hill ISD) | Am. Ind. | 1 | 1 |
| | Black | 11 | 12 |
| | Asian | 2 | 3 |
| | Span. Surn. | 40 | 50 |
| | Other | 622 | 770 |
| | TOTAL | 676 | 836 |
| #3<br>Coppell H.S.<br>(Coppell ISD) | Am. Ind. | 1 | 1 |
| | Black | 1 | 2 |
| | Asian | 1 | 1 |
| | Span. Surn. | 12 | 17 |
| | Other | 170 | 230 |
| | TOTAL | 184 | 251 |

| GEOGRAPHICAL STATISTICAL PUPIL RESIDENCE AREA | PUPIL ETHNIC CATEGORY | ENROLLMENTS FOR SCHOOL YEAR 1980-1981* | ENROLLMENTS FOR SCHOOL YEAR 1985-1986** |
|---|---|---|---|
| #I<br>Hillcrest, White, Jefferson H.S. (Dallas ISD) | Am. Ind. | 14 | 16 |
| | Black | 980 | 1236 |
| | Asian | 35 | 45 |
| | Span. Surn. | 351 | 504 |
| | Other | 4750 | 5340 |
| | TOTAL | 6380 | 6884 |
| #II<br>Adamson, Sunset H.S. (Dallas ISD) | Am. Ind. | 50 | 55 |
| | Black | 308 | 398 |
| | Asian | 8 | 11 |
| | Span. Surn. | 1360 | 1550 |
| | Other | 2078 | 2260 |
| | TOTAL | 3760 | 4200 |
| #III<br>Carter, Kimball H.S. (Dallas ISD) | Am. Ind. | 6 | 8 |
| | Black | 1740 | 2190 |
| | Asian | 14 | 15 |
| | Span. Surn. | 308 | 392 |
| | Other | 1990 | 2260 |
| | TOTAL | 4169 | 4492 |
| #IV<br>Adams H.S. (Dallas ISD) | Am. Ind. | 11 | 13 |
| | Black | 308 | 340 |
| | Asian | 15 | 19 |
| | Span. Surn. | 226 | 340 |
| | Other | 2860 | 3172 |
| | TOTAL | 3490 | 3907 |
| #V<br>Samuell, Skyline H.S. (Dallas ISD) | Am. Ind. | 19 | 23 |
| | Black | 1500 | 1860 |
| | Asian | 11 | 13 |
| | Span. Surn. | 620 | 796 |
| | Other | 4798 | 5080 |
| | TOTAL | 7154 | 7478 |
| #VI<br>Seagoville H.S. (Dallas ISD) | Am. Ind. | 2 | 4 |
| | Black | 180 | 226 |
| | Asian | 2 | 4 |
| | Span. Surn. | 86 | 226 |
| | Other | 812 | 1040 |
| | TOTAL | 1080 | 1502 |
| #VII<br>Lincoln North Dallas Wilson H.S. (Dallas ISD) | Am. Ind. | 29 | 33 |
| | Black | 4020 | 4068 |
| | Asian | 29 | 33 |
| | Span. Surn. | 1780 | 1828 |
| | Other | 1228 | 1098 |
| | TOTAL | 6912 | 7005 |
| #VIII<br>So. Oak Cliff Roosevelt Pinkston H.S. (Dallas ISD) | Am. Ind. | 16 | 18 |
| | Black | 9682 | 10176 |
| | Asian | 2 | 2 |
| | Span. Surn. | 1036 | 1092 |
| | Other | 168 | 168 |
| | TOTAL | 11294 | 11852 |
| #4<br>DeSoto H.S. (DeSoto ISD) | Am. Ind. | 2 | 4 |
| | Black | 9 | 23 |
| | Asian | 3 | 4 |
| | Span. Surn. | 39 | 55 |
| | Other | 1568 | 2856 |
| | TOTAL | 1625 | 2942 |
| #5<br>Duncanville | Am. Ind. | 16 | 20 |
| | Black | 28 | 32 |

| | | | |
|---|---|---|---|
| | TOTAL | 3490 | 3907 |
| #V<br>Samuell,<br>Skyline<br>H.S.<br>(Dallas ISD) | Am. Ind. | 19 | 23 |
| | Black | 1500 | 1860 |
| | Asian | 11 | 13 |
| | Span. Surn. | 620 | 796 |
| | Other | 4798 | 5080 |
| | TOTAL | 7154 | 7478 |
| #VI<br>Seagoville<br>H.S.<br>(Dallas ISD) | Am. Ind. | 2 | 4 |
| | Black | 180 | 226 |
| | Asian | 2 | 4 |
| | Span. Surn. | 86 | 226 |
| | Other | 812 | 1040 |
| | TOTAL | 1080 | 1502 |
| #VII<br>Lincoln<br>North Dallas<br>Wilson<br>H.S.<br>(Dallas ISD) | Am. Ind. | 29 | 33 |
| | Black | 4020 | 4068 |
| | Asian | 29 | 33 |
| | Span. Surn. | 1780 | 1828 |
| | Other | 1228 | 1098 |
| | TOTAL | 6912 | 7005 |
| #VIII<br>So. Oak Cliff<br>Roosevelt<br>Pinkston H.S.<br>(Dallas ISD) | Am. Ind. | 16 | 18 |
| | Black | 9682 | 10176 |
| | Asian | 2 | 2 |
| | Span. Surn. | 1036 | 1092 |
| | Other | 168 | 168 |
| | TOTAL | 11294 | 11852 |
| #4<br>DeSoto H.S.<br>(DeSoto ISD) | Am. Ind. | 2 | 4 |
| | Black | 9 | 23 |
| | Asian | 3 | 4 |
| | Span. Surn. | 39 | 55 |
| | Other | 1568 | 2856 |
| | TOTAL | 1625 | 2942 |
| #5<br>Duncanville<br>H.S.<br>(Duncanville ISD) | Am. Ind. | 16 | 20 |
| | Black | 28 | 32 |
| | Asian | 11 | 12 |
| | Span. Surn. | 87 | 102 |
| | Other | 2910 | 3420 |
| | TOTAL | 3056 | 3598 |

| GEOGRAPHIC STATISTICAL PUPIL RESIDENCE AREA | PUPIL ETHNIC CATEGORY | ENROLLMENTS FOR SCHOOL YEAR 1980-1981* | ENROLLMENTS FOR SCHOOL YEAR 1985-86** |
|---|---|---|---|
| #6<br>Garland H.S.<br>(Garland ISD) | Am. Ind. | 10 | 11 |
| | Black | 696 | 760 |
| | Asian | 2 | 2 |
| | Span. Surn. | 144 | 290 |
| | Other | 1036 | 1215 |
| | TOTAL | 1970 | 2270 |
| #7<br>No. Garland H.S.<br>(Garland ISD) | Am. Ind. | 13 | 15 |
| | Black | 13 | 18 |
| | Asian | 6 | 8 |
| | Span. Surn. | 182 | 214 |
| | Other | 2600 | 3000 |
| | TOTAL | 2760 | 3240 |
| #8<br>So. Garland H.S.<br>(Garland ISD) | Am. Ind. | 8 | 10 |
| | Black | 83 | 99 |
| | Asian | 5 | 6 |
| | Span. Surn. | 293 | 231 |
| | Other | 3322 | 4060 |
| | TOTAL | 3811 | 4406 |
| #9<br>Grand Prairie H.S.<br>(Grand Prairie ISD) | Am. Ind. | 20 | 23 |
| | Black | 146 | 173 |
| | Asian | 9 | 11 |
| | Span. Surn. | 390 | 468 |
| | Other | 1760 | 2008 |
| | TOTAL | 2305 | 2683 |
| #10<br>So. Grand Prairie H.S.<br>(Grand Prairie ISD) | Am. Ind. | 14 | 16 |
| | Black | 66 | 83 |
| | Asian | 13 | 14 |
| | Span. Surn. | 330 | 406 |
| | Other | 1980 | 2310 |
| | TOTAL | 2403 | 2929 |
| #11<br>Highland Park H.S.<br>(Highland Park ISD) | Am. Ind. | 2 | 2 |
| | Black | 2 | 3 |
| | Asian | 6 | 8 |
| | Span. Surn. | 8 | 11 |
| | Other | 1020 | 985 |
| | TOTAL | 1085 | 1049 |
| #12<br>Irving H.S.<br>(Irving ISD) | Am. Ind. | 28 | 33 |
| | Black | 77 | 83 |
| | Asian | 6 | 9 |
| | Span. Surn. | 275 | 352 |
| | Other | 2475 | 2640 |
| | TOTAL | 2861 | 3117 |
| #13<br>McArthur H.S.<br>(Irving ISD) | Am. Ind. | 10 | 11 |
| | Black | 9 | 11 |
| | Asian | 7 | 8 |
| | Span. Surn. | 116 | 176 |
| | Other | 2112 | 2530 |
| | TOTAL | 2284 | 2936 |
| #14<br>Nimitz H.S.<br>(Irving ISD) | Am. Ind. | 34 | 37 |
| | Black | 50 | 55 |
| | Asian | 8 | 10 |
| | Span. Surn. | 308 | 415 |
| | Other | 2647 | 3080 |
| | TOTAL | | |

|  |  |  |  |
|---|---|---|---|
| (Grand Prairie ISD) | Span. Surn. | 390 | 468 |
|  | Other | 1760 | 2008 |
|  | TOTAL | 2305 | 2683 |
| #10 So. Grand Prairie H.S. (Grand Prairie ISD) | Am. Ind. | 14 | 16 |
|  | Black | 66 | 83 |
|  | Asian | 13 | 14 |
|  | Span. Surn. | 330 | 406 |
|  | Other | 1980 | 2310 |
|  | TOTAL | 2403 | 2929 |
| #11 Highland Park H.S. (Highland Park ISD) | Am. Ind. | 2 | 2 |
|  | Black | 2 | 3 |
|  | Asian | 6 | 8 |
|  | Span. Surn. | 8 | 11 |
|  | Other | 1020 | 985 |
|  | TOTAL | 1085 | 1049 |
| #12 Irving H.S. (Irving ISD) | Am. Ind. | 28 | 33 |
|  | Black | 77 | 83 |
|  | Asian | 6 | 9 |
|  | Span. Surn. | 275 | 352 |
|  | Other | 2475 | 2640 |
|  | TOTAL | 2861 | 3117 |
| #13 McArthur H.S. (Irving ISD) | Am. Ind. | 10 | 11 |
|  | Black | 9 | 11 |
|  | Asian | 7 | 8 |
|  | Span. Surn. | 116 | 176 |
|  | Other | 2112 | 2530 |
|  | TOTAL | 2284 | 2936 |
| #14 Nimitz H.S. (Irving ISD) | Am. Ind. | 34 | 37 |
|  | Black | 50 | 55 |
|  | Asian | 8 | 10 |
|  | Span. Surn. | 308 | 415 |
|  | Other | 2647 | 3080 |
|  | TOTAL | 3147 | 3797 |
| #15 Lancaster H.S. (Lancaster ISD) | Am. Ind. | 2 | 3 |
|  | Black | 44 | 48 |
|  | Asian | 1 | 1 |
|  | Span. Surn. | 49 | 57 |
|  | Other | 784 | 868 |
|  | TOTAL | 874 | 972 |

| GEOGRAPHICAL STATISTICAL PUPIL RESIDENCE AREA | PUPIL ETHNIC CATEGORY | ENROLLMENTS FOR SCHOOL YEAR 1980-1981* | ENROLLMENTS FOR SCHOOL YEAR 1985-1986** |
|---|---|---|---|
| #16 | Am. Ind. | 14 | 16 |
| Mesquite H.S. | Black | 12 | 15 |
| (Mesquite ISD) | Asian | 2 | 3 |
| | Span. Surn. | 264 | 313 |
| | Other | 3907 | 4400 |
| | TOTAL | 4199 | 4947 |
| #17 | Am. Ind. | 3 | 5 |
| N. Mesquite | Black | 15 | 19 |
| H.S. | Asian | 3 | 4 |
| (Mesquite ISD) | Span. Surn. | 299 | 244 |
| | Other | 2926 | 3482 |
| | TOTAL | 3246 | 3954 |
| #18 | Am. Ind. | 6 | 8 |
| Richardson | Black | 99 | 121 |
| H.S. | Asian | 12 | 15 |
| (Richardson ISD) | Span. Surn. | 102 | 123 |
| | Other | 3069 | 3161 |
| | TOTAL | 3288 | 3628 |
| #19 | Am. Ind. | 5 | 6 |
| Pearce H.S. | Black | 77 | 99 |
| (Richardson | Asian | 10 | 13 |
| ISD) | Span. Surn. | 125 | 154 |
| | Other | 2542 | 3025 |
| | TOTAL | 2890 | 3300 |
| #20 | Am. Ind. | 21 | 24 |
| Lake Highlands | Black | 186 | 224 |
| H.S. | Asian | 11 | 12 |
| (Richardson | Span. Surn. | 122 | 146 |
| ISD) | Other | 3025 | 3575 |
| | TOTAL | 3365 | 3981 |
| #21 | Am. Ind. | 5 | 6 |
| Berkner H.S. | Black | 77 | 88 |
| (Richardson | Asian | 11 | 13 |
| ISD) | Span. Surn. | 129 | 154 |
| | Other | 2554 | 3036 |
| | TOTAL | 2[illegible]76 | 3297 |
| #22 | Am. Ind. | Secondary Pupils, now attending Mesquite High School, are included in projections for N. Mesquite H.S. | |
| Sunnyvale ISD | Black | | |
| | Asian | | |
| | Span. Surn. | | |
| | Other | | |
| | TOTAL | | |
| #23 | Am. Ind. | 1 | 1 |
| Wilmer-Hutchins | Black | 2456 | 2853 |
| H.S. | Asian | 1 | 1 |
| (Wilmer-Hutchins | Span. Surn. | 61 | 74 |
| ISD) | Other | 36 | 31 |
| | TOTAL | 2555 | 3052 |

--------TARRANT COUNTY--------

| GEOGRAPHIC STATISTICAL PUPIL RESIDENCE AREA | PUPIL ETHNIC CATEGORY | ENROLLMENTS FOR SCHOOL YEAR 1980-1981* | ENROLLMENTS FOR SCHOOL YEAR |
|---|---|---|---|

| | | | |
|---|---|---|---|
| | Other | 2542 | 3025 |
| | TOTAL | 2890 | 3300 |
| #20 Lake Highlands H.S. (Richardson ISD) | Am. Ind. | 21 | 24 |
| | Black | 186 | 224 |
| | Asian | 11 | 12 |
| | Span. Surn. | 122 | 146 |
| | Other | 3025 | 3575 |
| | TOTAL | 3365 | 3981 |
| #21 Berkner H.S. (Richardson ISD) | Am. Ind. | 5 | 6 |
| | Black | 77 | 88 |
| | Asian | 11 | 13 |
| | Span. Surn. | 129 | 154 |
| | Other | 2554 | 3036 |
| | TOTAL | 2976 | 3297 |
| #22 Sunnyvale ISD | Am. Ind. | Secondary Pupils, now attending Mesquite High School, are included in projections for N. Mesquite H.S. | |
| | Black | | |
| | Asian | | |
| | Span. Surn. | | |
| | Other | | |
| | TOTAL | | |
| #23 Wilmer-Hutchins H.S. (Wilmer-Hutchins ISD) | Am. Ind. | 1 | 1 |
| | Black | 2456 | 2853 |
| | Asian | 1 | 1 |
| | Span. Surn. | 61 | 74 |
| | Other | 36 | 31 |
| | TOTAL | 2555 | 3052 |

## --------TARRANT COUNTY--------

| GEOGRAPHIC STATISTICAL PUPIL RESIDENCE AREA | PUPIL ETHNIC CATEGORY | ENROLLMENTS FOR SCHOOL YEAR 1980-1981* | ENROLLMENTS FOR SCHOOL YEAR 1985-1986** |
|---|---|---|---|
| #24 Arlington H.S. (Arlington ISD) | Am. Ind. | 1 | 2 |
| | Black | 4 | 8 |
| | Asian | 4 | 5 |
| | Span. Surn. | 52 | 76 |
| | Other | 1820 | 2072 |
| | TOTAL | 1881 | 2163 |

| GEOGRAPHIC STATISTICAL PUPIL RESIDENCE AREA | PUPIL ETHNIC CATEGORY | ENROLLMENTS FOR SCHOOL YEAR 1980-1981* | ENROLLMENTS FOR SCHOOL YEAR 1985-1986** |
|---|---|---|---|
| #25 | Am. Ind. | 7 | 8 |
| Houston H.S. | Black | 122 | 134 |
| (Arlington | Asian | 2 | 4 |
| ISD) | Span. Surn. | 129 | 144 |
| | Other | 2408 | 2489 |
| | TOTAL | 2568 | 2779 |
| #26 | Am. Ind. | 2 | [illegible] |
| Lamar H.S. | Black | 36 | 50 |
| (Arlington | Asian | 6 | 7 |
| ISD) | Span. Surn. | 101 | 110 |
| | Other | 1708 | 1870 |
| | TOTAL | 1856 | 2044 |
| #27 | Am. Ind. | 2 | 2 |
| Bowie H.S. | Black | 6 | 7 |
| (Arlington ISD) | Asian | 2 | 5 |
| | Span. Surn. | 44 | 62 |
| | Other | 1829 | 1932 |
| | TOTAL | 1883 | 2008 |
| #28 | Am. Ind. | 3 | 3 |
| Azle H.S. | Black | 3 | 5 |
| (Azle ISD) | Asian | 2 | 3 |
| | Span. Surn. | 13 | 14 |
| | Other | 1008 | 1146 |
| | TOTAL | 1029 | 1171 |
| #29 | Am. Ind. | 7 | 10 |
| Haltom City | Black | 13 | 16 |
| H.S. | Asian | 1 | 2 |
| (Birdville ISD) | Span. Surn. | 110 | 132 |
| | Other | 2660 | 2840 |
| | TOTAL | 2791 | 3000 |
| #30 | Am. Ind. | 1 | 1 |
| Richland H.S. | Black | 2 | 4 |
| (Birdville ISD) | Asian | 4 | 6 |
| | Span. Surn. | 55 | 65 |
| | Other | 2168 | 2492 |
| | TOTAL | 2240 | 2667 |
| #31 | Am. Ind. | 0 | 1 |
| Carroll H.S. | Black | 1 | 2 |
| (Carroll ISD) | Asian | 1 | 1 |
| | Span. Surn. | 11 | 13 |
| | Other | 196 | 230 |
| | TOTAL | 209 | 247 |
| #32 | Am. Ind. | 3 | 3 |
| Castleberry | Black | 22 | 28 |
| H.S. | Asian | 5 | 6 |
| (Castleberry ISD) | Span. Surn. | 105 | 140 |
| | Other | 1092 | 1283 |
| | TOTAL | 1312 | 1450 |
| #33 | Am. Ind. | 2 | 2 |
| Crowley H.S. | Black | 4 | 6 |
| (Crowley ISD) | Asian | 1 | 1 |
| | Span. Surn. | 105 | 121 |
| | Other | 1063 | 1276 |
| | TOTAL | 1171 | 1401 |
| #34 | Am. Ind. | 1 | 2 |
| Boswell H.S. | Black | 1 | 2 |

| | | | |
|---|---|---|---|
| | Other | 1008 | 1146 |
| | TOTAL | 1029 | 1171 |
| #29<br>Haltom City<br>H.S.<br>(Birdville ISD) | Am. Ind. | 7 | 10 |
| | Black | 13 | 16 |
| | Asian | 1 | 2 |
| | Span. Surn. | 110 | 132 |
| | Other | 2660 | 2840 |
| | TOTAL | 2791 | 3000 |
| #30<br>Richland H.S.<br>(Birdville ISD) | Am. Ind. | 1 | 1 |
| | Black | 2 | 4 |
| | Asian | 4 | 6 |
| | Span. Surn. | 55 | 65 |
| | Other | 2168 | 2492 |
| | TOTAL | 2240 | 2667 |
| #31<br>Carroll H.S.<br>(Carroll ISD) | Am. Ind. | 0 | 1 |
| | Black | 1 | 2 |
| | Asian | 1 | 1 |
| | Span. Surn. | 11 | 13 |
| | Other | 196 | 230 |
| | TOTAL | 209 | 247 |
| #32<br>Castleberry<br>H.S.<br>(Castleberry ISD) | Am. Ind. | 3 | [illegible] |
| | Black | 22 | 28 |
| | Asian | 5 | 6 |
| | Span. Surn. | 105 | 140 |
| | Other | 1092 | 1288 |
| | TOTAL | 1312 | 1450 |
| #33<br>Crowley H.S.<br>(Crowley ISD) | Am. Ind. | 2 | 2 |
| | Black | 4 | 6 |
| | Asian | 1 | 1 |
| | Span. Surn. | 105 | 121 |
| | Other | 1063 | 1276 |
| | TOTAL | 1171 | 1401 |
| #34<br>Boswell H.S.<br>(Eagle Mountain-<br>Saginaw ISD) | Am. Ind. | 1 | 2 |
| | Black | 1 | 2 |
| | Asian | 0 | 1 |
| | Span. Surn. | 90 | 106 |
| | Other | 829 | 952 |
| | TOTAL | 921 | 1064 |
| #35<br>Everman H.S.<br>(Everman ISD) | Am. Ind. | 1 | 2 |
| | Black | 207 | 240 |
| | Asian | 0 | 0 |
| | Span. Surn. | 118 | 146 |
| | Other | 913 | 1014 |
| | TOTAL | 1239 | 1420 |

| GEOGRAPHIC STATISTICAL PUPIL RESIDENCE AREA | PUPIL ETHNIC CATEGORY | ENROLLMENTS FOR SCHOOL YEAR 1980-1981* | ENROLLMENTS FOR SCHOOL YEAR 1985-1986** |
|---|---|---|---|
| #IX | Am. Ind. | 3 | 4 |
| Eastern Hills | Black | 540 | 595 |
| H.S. | Asian | 3 | 4 |
| (Fort Worth ISD) | Span. Surn. | 24 | 38 |
| | Other | 1346 | 1528 |
| | TOTAL | 1960 | 2200 |
| #X | Am. Ind. | 5 | 6 |
| Polytechnic, | Black | 3125 | 3185 |
| Wyatt, Dunbar | Asian | 1 | 2 |
| H.S. | Span. Surn. | 343 | 395 |
| (Fort Worth ISD) | Other | 1880 | 2056 |
| | TOTAL | 5460 | 5680 |
| #XI | Am. Ind. | 6 | 8 |
| Southwest, | Black | 1918 | 1954 |
| Paschal H.S. | Asian | 7 | 8 |
| (Fort Worth ISD) | Span. Surn. | 740 | 781 |
| | Other | 3771 | 3850 |
| | TOTAL | 6563 | 6731 |
| #XII | Am. Ind. | 10 | 12 |
| Arlington Hts., | Black | 1008 | 1058 |
| Western Hills H.S. | Asian | 16 | 17 |
| (Fort Worth ISD) | Span. Surn. | 211 | 238 |
| | Other | 3870 | 4000 |
| | TOTAL | 5060 | 5400 |
| #XIII | Am. Ind. | 5 | 5 |
| Northside, Carter- | Black | 918 | 1008 |
| Riverside, Diamond | Asian | 5 | 6 |
| Hill H.S. | Span. Surn. | 1091 | 1178 |
| (Fort Worth ISD) | Other | 1420 | 1500 |
| | TOTAL | 3510 | 3790 |
| #36 | Am. Ind. | 1 | 2 |
| Grapevine H.S. | Black | 17 | 20 |
| (Grapevine ISD) | Asian | 1 | 1 |
| | Span. Surn. | 71 | 84 |
| | Other | 1109 | 1257 |
| | TOTAL | 1198 | 1363 |
| #37 | Am. Ind. | 24 | 25 |
| Bell H.S. | Black | 4 | 5 |
| (Hurst-Euless- | Asian | 4 | 5 |
| Bedford ISD) | Span. Surn. | 54 | 63 |
| | Other | 2513 | 2937 |
| | TOTAL | 2600 | 3100 |
| #38 | Am. Ind. | 11 | 12 |
| Trinity H.S. | Black | 29 | 32 |
| (Hurst-Euless- | Asian | 2 | 4 |
| Bedford ISD) | Span. Surn. | 110 | 129 |
| | Other | 2890 | 3465 |
| | TOTAL | 3042 | 3642 |
| #39 | Am. Ind. | 0 | 1 |
| Keller H.S. | Black | 1 | 2 |
| (Keller ISD) | Asian | 0 | 0 |
| | Span. Surn. | 3 | 5 |

|  |  |  |  |
|---|---|---|---|
| Arlington Hts., | Black | 1008 | 1058 |
| Western Hills H.S. | Asian | 16 | 17 |
| (Fort Worth ISD) | Span. Surn. | 211 | 238 |
|  | Other | 3870 | 4000 |
|  | TOTAL | 5060 | 5400 |
| #XIII | Am. Ind. | 5 | 5 |
| Northside, Carter- | Black | 918 | 1008 |
| Riverside, Diamond | Asian | 5 | 6 |
| Hill H.S. | Span. Surn. | 1091 | 1178 |
| (Fort Worth ISD) | Other | 1420 | 1500 |
|  | TOTAL | 3510 | 3790 |
| #36 | Am. Ind. | 1 | 2 |
| Grapevine H.S. | Black | 17 | 20 |
| (Grapevine ISD) | Asian | 1 | 1 |
|  | Span. Surn. | 71 | 84 |
|  | Other | 1109 | 1257 |
|  | TOTAL | 1198 | 1363 |
| #37 | Am. Ind. | 24 | 25 |
| Bell H.S. | Black | 4 | 5 |
| (Hurst-Euless- | Asian | 4 | 5 |
| Bedford ISD) | Span. Surn. | 54 | 63 |
|  | Other | 2513 | 2937 |
|  | TOTAL | 2600 | 3100 |
| #38 | Am. Ind. | 11 | 12 |
| Trinity H.S. | Black | 29 | 32 |
| (Hurst-Euless- | Asian | 2 | 4 |
| Bedford ISD) | Span. Surn. | 110 | 129 |
|  | Other | 2890 | 3465 |
|  | TOTAL | 3042 | 3642 |
| #39 | Am. Ind. | 0 | 1 |
| Keller H.S. | Black | 1 | 2 |
| (Keller ISD) | Asian | 0 | 0 |
|  | Span. Surn. | 3 | 5 |
|  | Other | 825 | 929 |
|  | TOTAL | 829 | 937 |
| #40 | Am. Ind. | 0 | 1 |
| Kennedale H.S. | Black | 1 | 1 |
| (Kennedale ISD) | Asian | 0 | 0 |
|  | Span. Surn. | 11 | 12 |
|  | Other | 247 | 287 |
|  | TOTAL | 259 | 321 |

| GEOGRAPHIC STATISTICAL PUPIL RESIDENCE AREA | PUPIL ETHNIC CATEGORY | ENROLLMENTS FOR SCHOOL YEAR 1980-1981* | ENROLLMENTS FOR SCHOOL YEAR 1985-1986** |
|---|---|---|---|
| #41 Lake Worth H.S. (Lake Worth ISD) | Am. Ind. | 0 | 1 |
| | Black | 2 | 2 |
| | Asian | 2 | 2 |
| | Span. Surn. | 23 | 28 |
| | Other | 414 | 528 |
| | TOTAL | 447 | 569 |
| #42 Mansfield H.S. (Mansfield ISD) | Am. Ind. | 1 | 2 |
| | Black | 118 | 141 |
| | Asian | 0 | 1 |
| | Span. Surn. | 24 | 29 |
| | Other | 986 | 1171 |
| | TOTAL | 1129 | 1344 |
| #43 Brewer H.S. (White Settlement ISD) | Am. Ind. | 2 | 2 |
| | Black | 3 | 5 |
| | Asian | 1 | 1 |
| | Span. Surn. | 28 | 31 |
| | Other | 896 | 1064 |
| | TOTAL | 931 | 1104 |

*In interpreting the figures in this column, apply an error of estimate of ± 5% for numbers 1 to 40, ± 4% for numbers 41 - 100 ± 3.5% for numbers 101 to 499, and ± 3% for numbers 500 and over.

**In interpreting the figures in this column, apply an error of estimate of ± 7% for numbers 1 to 40, ± 6% for numbers 41 to 100, ± 5.5% for numbers 101 and over.

Special Note: It is also important, in interpreting the figures in this table, to keep in mind that the figures shown do NOT represent the number of prospective enrollees for any particular school but rather secondary level resident pupils of geographic areas.

### Addendum to Tables P-1 and P-2

### Summary of Enrollment Forecasts

### Grades K-12

| | 1980-81 | 1985-86 |
|---|---|---|
| DALLAS COUNTY | | |
| Dallas ISD | 153,797 | 166,610 |
| Suburban Districts | 193,141 | 224,104 |
| Private/Parochial Schools | 30,100 | 31,900 |
| County Total - All Schools | 377,038 | 422,614 |
| TARRANT COUNTY | | |
| Fort Worth ISD | 77,728 | 81,630 |
| Suburban Districts | 106,085 | 120,860 |
| Private/Parochial Schools | 11,200 | 11,800 |
| County Total - All Schools | 195,013 | 214,290 |

### Grades 9-12

| | | |
|---|---|---|
| DALLAS COUNTY | | |
| Dallas ISD | 44,239 | 47,320 |
| Suburban Districts | 56,100 | 66,375 |

± [illegible]% for numbers 101 to 499, and ± 3% for numbers 500 and over.

**In interpreting the figures in this column, apply an error of estimate of ± 7% for numbers 1 to 40, ± 6% for numbers 41 to 100, ± 5.5% for numbers 101 and over.

Special Note: It is also important, in interpreting the figures in this table, to keep in mind that the figures shown do NOT represent the number of prospective enrollees for any particular school but rather secondary level resident pupils of geographic areas.

## Addendum to Tables P-1 and P-2

## Summary of Enrollment Forecasts

### Grades K-12

| | 1980-81 | 1985-86 |
|---|---|---|
| DALLAS COUNTY | | |
| Dallas ISD | 153,797 | 166,610 |
| Suburban Districts | 193,141 | 224,104 |
| Private/Parochial Schools | 30,100 | 31,900 |
| County Total - All Schools | 377,038 | 422,614 |
| TARRANT COUNTY | | |
| Fort Worth ISD | 77,728 | 81,630 |
| Suburban Districts | 106,085 | 120,860 |
| Private/Parochial Schools | 11,200 | 11,800 |
| County Total - All Schools | 195,013 | 214,290 |

### Grades 9-12

| | 1980-81 | 1985-86 |
|---|---|---|
| DALLAS COUNTY | | |
| Dallas ISD | 44,239 | 47,320 |
| Suburban Districts | 56,100 | 66,375 |
| Private/Parochial Schools | 6,050 | 6,870 |
| County Total - All Schools | 106,389 | 120,565 |
| TARRANT COUNTY | | |
| Fort Worth ISD | 22,053 | 23,801 |
| Suburban Districts | 29,535 | 33,794 |
| Private/Parochial Schools | 2,040 | 2,250 |
| County Total - All Schools | 54,628 | 59,845 |

Table P-3 is presented only to illustrate decline in certain ethnic components of pupil enrollments with simultaneous increase in other ethnic components of pupil enrollments in a central-city school district during the period extending from school year 1969-70 to school year 1973-74. These trends, as mentioned in a preceding section of this Appendix, are expected to undergo significant change before 1980.

TABLE P-3

HISTORICAL ENROLLMENTS BY RACE/ETHNIC GROUPING, DALLAS ISD 1970-74 *

| | RACE/ETHNIC GROUP INDIAN | BLACK | ORIENTAL | SPANISH AMERICAN | OTHER | TOTAL |
|---|---|---|---|---|---|---|
| chool | 82 | 11,073 | 47 | 2,090 | 23,159 | 36,451 |
| gh School | 54 | 11,611 | 47 | 2,581 | 19,695 | 33,988 |
| tary | 322 | 32,964 | 198 | 9,274 | 51,529 | 94,287 |
| | 458 | 55,648 | 292 | 13,945 | 94,383 | 164,725 |
| chool | 115 | 10,364 | 48 | 2,147 | 22,604 | 35,278 |
| gh School | 94 | 12,190 | 60 | 3,418 | 18,729 | 34,391 |
| tary | 360 | 34,840 | 186 | 9,589 | 44,352 | 89,327 |
| | 569 | 57,394 | 294 | 15,154 | 85,685 | 159,096 |
| hool | 108 | 11,532 | 68 | 2,559 | 21,208 | 35,475 |
| School | 104 | 12,457 | 59 | 3,275 | 16,877 | 32,772 |
| ary | 311 | 35,654 | 170 | 10,075 | 39,655 | 85,865 |
| | 523 | 59,643 | 297 | 15,909 | 77,740 | 154,112 |
| hool | 105 | 12,120 | 66 | 2,598 | 19,314 | 34,203 |
| School | 123 | 13,188 | 78 | 3,351 | 14,979 | 31,719 |
| ary | 284 | 37,160 | 238 | 11,192 | 37,855 | 86,729 |
| | 512 | 62,468 | 382 | 17,141 | 72,148 | 152,651 |
| mber | +54 | +6,820 | +90 | +3,196 | -22,235 | -12,074 |
| | +11.8 | +12.25 | +30.48 | +22.92 | -23.55 | -7.33 |

as ISD

## HISTORICAL ENROLLMENTS BY RACE/ETHNIC GROUPING, DALLAS ISD 1970-74 *

| SCHOOL YEAR | GRADE LEVEL | RACE/ETHNIC GROUP INDIAN | BLACK | ORIENTAL | SPANISH AMERICAN |
|---|---|---|---|---|---|
| 1970-71 | High School | 82 | 11,073 | 47 | 2,090 |
| | Jr. High School | 54 | 11,611 | 47 | 2,581 |
| | Elementary | 322 | 32,964 | 198 | 9,274 |
| | Total | 458 | 55,648 | 292 | 13,945 |
| 1971-72 | High School | 115 | 10,364 | 48 | 2,147 |
| | Jr. High School | 94 | 12,190 | 60 | 3,418 |
| | Elementary | 360 | 34,840 | 186 | 9,589 |
| | Total | 569 | 57,394 | 294 | 15,154 |
| 1972-73 | High School | 108 | 11,532 | 68 | 2,559 |
| | Jr. Hi. School | 104 | 12,457 | 59 | 3,275 |
| | Elementary | 311 | 35,654 | 170 | 10,075 |
| | Total | 523 | 59,643 | 297 | 15,909 |
| 1973-74 | High School | 105 | 12,120 | 66 | 2,598 |
| | Jr. Hi. School | 123 | 13,188 | 78 | 3,351 |
| | Elementary | 284 | 37,160 | 238 | 11,192 |
| | Total | 512 | 62,468 | 382 | 17,141 |
| Increase/Decrease | Number | +54 | +6,820 | +90 | +3,196 |
| Over 3-Year span | % | +11.8 | +12.25 | +30.48 | +22.92 |

* From records of Dallas ISD

Table P-4 is a collection of some of the widely accepted forecasts that have been made by other agencies, for the populations for 1980 and 1985 in the Metroplex.

TABLE P-4

FORECASTS OF POPULATION

DALLAS AND TARRANT COUNTIES

1980, 1985

POPULATION FORECASTS

|  | Actual 1970 | 1980 | 1985 | Percent** Increase 1970 to 1985 |
|---|---|---|---|---|
|  | 1,327,321* | 1,781,000* | 2,046,000* | 54.1% |
| s | 844,401* | 997,000* | 1,063,000* | 25.9% |
| s of Dallas County | 482,920** | 784,000** | 983,000** | 124.0% |
|  | 716,317# | 955,000# | 1,100,499# | 50.8% |
| Worth | 393,455# | 477,540# | 572,235# | 47.7% |
| s of Tarrant County | 322,862# | 477,540# | 528,214# | 63.6% |
| roplex ## | 2,344,600° | 3,098,500° | 3,641,200° | 55.3% |

ation Projections for the City and County of Dallas 1970-1985, of Dallas Department of Planning and Urban Development, 1972

ed from other data included in this table

t #2, Population Allocation for Planning Units in Fort Worth and Environs: 2000, City of Fort Worth Planning Department, 1971

mic Potentials Handbook 1973 (3rd Edition), The Institute of Urban and onmental Studies of Southern Methodist Univeristy

n, Dallas, Denton, Ellis, Johnson, Kaufman, Rockwall, and Tarrant Counties

# POPULATION FORECASTS

| | Actual 1970 | 1980 | 1985 | Perce Incre 1970 |
|---|---|---|---|---|
| Dallas County | 1,327,321* | 1,781,000* | 2,046,000* | 54 |
| City of Dallas | 844,401* | 997,000* | 1,063,000* | 25 |
| Suburban Areas of Dallas County | 482,920** | 784,000** | 983,000** | 124 |
| Tarrant County | 716,317# | 955,000# | 1,100,499# | 50 |
| City of Fort Worth | 393,455# | 477,540# | 572,235# | 47 |
| Suburban Areas of Tarrant County | 322,862# | 477,540# | 528,214# | 63 |
| Southwest Metroplex ## | 2,344,600$^{o}$ | 3,098,500$^{o}$ | 3,641,200$^{o}$ | 55 |

* From Population Projections for the City and County of Dallas 1970-1985, City of Dallas Department of Planning and Urban Development, 1972

** Derived from other data included in this table

# From Report #2, Population Allocation for Planning Units in Fort Worth and E

1970-2000, City of Fort Worth Planning Department, 1971

o From Economic Potentials Handbook 1973 (3rd Edition), The Institute of Urban

Environmental Studies of Southern Methodist Univeristy

## Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Rockwall, and Tarrant

A comparison of the data in Table P-4 and SWEP school future enrollment data will give a strong indication of how much slower school enrollments will increase during this time period than will the total population in each of the various geographic subdivisions. For example, while the total suburban area populations are expected to increase 124% and 63.6% respectively for Dallas and Tarrant County from 1970 to 1985, during the same time frame and in the same areas public school pupil enrollments for Grades K-12 will increase only 46.3% and 30.7% respectively according to SWEP forecasts. While these differences between the increases of the total population and of the school enrollments result from the interplay of many influencing factors, the principal influence has been and will be the decrease in birth and fertility rates for both the "in-place" population and for the migrant cohort of the population.

Table P-5 is presented for two purposes: (1) to show the changes in public school enrollments that had already occurred in various geographic areas and school districts of the two counties between 1970 and the time of the completion of SWEP studies; and (2) to show the current ratios that exist between enrollments for secondary level and total enrollments (Grades K-12) in the public schools.

## TABLE P-5

## DALLAS AND TARRANT COUNTIES PUBLIC SCHOOL ENROLLMENTS

| Attendance Areas | Enrollment Gr. K-12 Oct. 1, 1970 | Enrollments 10/1/73 Gr. K-12 | **Sec Gr. 9-12 | Per Cent 10/1/73 Gr. 9-12 Enr. was of Gr. K-12 Enr. |
|---|---|---|---|---|
| Dallas County | | | | |
| N. Garland H.S. | 6,302 | 8,949 | 2,613 | 29.2 |
| S. Garland H.S. | 7,277 | 9,283 | 2,902 | 32.2 |
| Garland H.S. | 7,862 | 7,446 | 2,162 | 29.0 |
| Grand Prairie H.S. | 8,160 | 7,827 | 1,988 | 25.4 |
| S. Grand Prairie H.S. | 3,076 | 4,864 | 1,285 | 26.4 |
| N. Mesquite H.S. | 7,252 | 8,501 | 2,933 | 34.5 |
| Mesquite H.S. | 10,298 | 11,674 | 3,144 | 27.0 |
| Richardson H.S. | 11,259 | 11,479 | 3,745 | 32.1 |
| Berkner H.S. | 4,017 | 5,577 | 1,597 | 27.1 |
| Lake Highland H.S. | 7,092 | 8,598 | 2,796 | 32.5 |
| Pearce H.S. | 6,573 | 8,085 | 2,317 | 28.7 |
| Irving H.S. | 9,796 | 9,586 | 2,638 | 27.5 |
| Nimitz H.S. | 6,510 | 7,919 | 2,500 | 31.5 |
| McArthur H.S. | 7,890 | 7,807 | 2,404 | 30.7 |
| Highland Park H.S. | 5,183 | 4,620 | 1,625 | 35.0 |
| Sunnyvale (Grades K-8) | 196 | 191 | 0* | - |
| Wilmer-Hutchins H.S. | 4,436 | 5,366 | 1,502 | 28.0 |
| Carrollton-FB H.S. | 9,539 | 11,269 | 3,238 | 28.5 |
| Cedar Hill H.S. | 695 | 1,149 | 381 | 33.1 |
| Coppell H.S. | 531 | 505 | 139 | 27.5 |
| DeSoto H.S. | 2,124 | 2,981 | 780 | 26.2 |
| Duncanville H.S. | 4,644 | 6,331 | 1,698 | 26.9 |
| Dallas ISD-All Areas | 164,726 | 152,651 | 43,931 | 28.7 |
| Total Dallas County | 295,438 | 302,658 | 88,328 | 29.1 |
| Suburban Areas | 130,712 | 150,007 | 44,397 | 29.5 |
| Tarrant County | | | | |
| Tarrant County Total | 167,602 | 169,300 | 49,099 | 29.0 |
| Ft. Worth ISD | 89,088 | 76,834 | 21,484 | 27.9 |
| Suburban Areas | 78, 514 | 92,466 | 27,613 | 29.8 |

*assigned to Mesquite--secondary pupils now attend Mesquite schools.

**9th grade prorated from Junior High School enrollments and added to actual enrollments for grades 10-12.

The variance between geographic areas and school districts in respect to the ratio of secondary enrollments to all-grades enrollments has been determined to be principally due to three factors:

(1) the easy accessibility of private and parochial schools to the residents of each area;

(2) a combination effect of the constituent ratios of ethnic minorities in the pupil populations of each area, coupled with the socio-economic status of families of pupils, and

(3) the presence (or absence) of a strong and effective program of "drop-out prevention" in the schools of the respective areas.

The effects of these factors in respect to high or low ratios of pupils in the secondary schools of the areas studied can be summarized as follows. Other factors being equal, an area with good, easily accessible parochial/private secondary schools and no such private/parochial elementary schools will have a relatively lower proportion of public school pupils in public secondary schools than would otherwise be expected, and if the area has the reverse situation -- good, easily accessible private and parochial elementary schools but no such private/parochial secondary schools -- it will have a higher ratio of secondary to elementary pupils in the public schools than would otherwise be expected. Furthermore, other factors being equal, an area that has a high percentage of those ethnic minorities which have a strong tradition of early school drop-out will have a lower ratio of secondary-to-elementary or secondary-to-total enrollments than would otherwise be expected, but this effect will diminish as the relative percentage of very low income families diminishes. Finally, other factors being equal, if the public schools of an area have a strong, continuously promulgated drop-out prevention program, including a relatively great effort to make the curricula relevant to the perceived needs of pupils, the area will have a higher ratio of secondary-to-total enrollment than it would otherwise have. Relevant to this discussion; from SWEP demographic projections, it parochial/private secondary schools and no such private/parochial elementary schools will have a relatively lower proportion of public school pupils in public secondary schools than would otherwise be expected, and if the area has the reverse situation -- good, easily accessible private and parochial elementary schools but no such private/parochial secondary schools -- it will have a higher ratio of secondary to elementary pupils in the public schools than would otherwise be expected. Furthermore, other factors being equal, an area that has a high percentage of those ethnic minorities which have a strong tradition of early school drop-out will have a lower ratio of secondary-to-elementary or secondary-to-total enrollments than would otherwise be expected, but this effect will diminish as the relative percentage of very low income families diminishes. Finally, other factors being equal, if the public schools of an area have a strong, continuously promulgated drop-out prevention program, including a relatively great effort to make the curricula relevant to the perceived needs of pupils, the area will have a higher ratio of secondary-to-total enrollment than it would otherwise have. Relevant to this discussion; from SWEP demographic projections, it was assumed that the overall holding power of most of the public schools will have improved somewhat by 1985 and that a slightly higher proportion (1% more) of the total public school enrollments will remain in school through secondary levels.

# III. Forecasts of Pupil Socio-Economic Backgrounds

The introduction to this Appendix called attention to the decision to include in Project demographic studies a forecast of the socio-economic status of the families of prospective pupil enrollees of the Project-resultant school. The following parts of this section present a description of the difficulties encountered in assembling information and data on pupils' socio-economic backgrounds; the resultant limitations that had to be accepted for the Project; an account of the methods used to derive the forecasts; and, finally, the actual forecasts of indicators of socio-economic status. Even though this part of the SWEP demographic studies is not as complete or comprehensive as originally intended, it is believed that the data presented may prove useful and helpful at least to the educational planners and decision makers of the two central counties' school districts as they give consideration to the application of the Project school Model to their respective schooling problems in the years ahead.

## A. Difficulties In Delineating Socio-Economic Characteristics and Collecting Needed Data

Preliminary decisions of the Project called for the derivation of several forecasts of aspects of family socio-economic status of pupils in the various parts of Dallas and Tarrant counties. Soon after work began in the planning and organization of the SWEP effort to carry out that original intent, and also as the work progressed, difficulties were encountered which necessitated reducing the scope of the socio-economic forecasts. The main difficulties that arose, and the Project responses to them, were as follows:

1. The first difficulty that had to be faced was that of deter-

central counties' school districts as they give consideration to the application of the Project school Model to their respective schooling problems in the years ahead.

## A. Difficulties In Delineating Socio-Economic Characteristics and Collecting Needed Data

Preliminary decisions of the Project called for the derivation of several forecasts of aspects of family socio-economic status of pupils in the various parts of Dallas and Tarrant counties. Soon after work began in the planning and organization of the SWEP effort to carry out that original intent, and also as the work progressed, difficulties were encountered which necessitated reducing the scope of the socio-economic forecasts. The main difficulties that arose, and the Project responses to them, were as follows:

1. The first difficulty that had to be faced was that of determining criteria for socio-economic conditions that would be meaningful to future planners. A great amount of attention has been given in recent years to social and economic backgrounds of pupils because, in general, educational researchers, instructional specialists, and other educators have come to believe that there is a very strong and significant interrelation between the social and economic characteristics of

the pupil's home environment and his or her success in school. Yet, there is only a rather hazy agreement in the educational community as to what constitutes a good home background for a pupil, and, likewise, very sketchy agreement on the various criteria which should be used in differentiating a good pupil home background from a poor pupil home background -- much less the emphasis and priority which should be assigned to each of the elements of home environment. The one thread of consensus that was found to be dominant in this question was that of the economic resources of the family. Nearly all agree that while family income is not absolutely definitive in differentiating the relative worthiness of the home background for pupils, there are so few instances of good pupil home environment where there is an extremely low family economic base that, for all practical purposes, family income can and should be used as an index or indicator of the pupil's family background.

2. Another difficulty was the dearth of available and reliable information regarding the socio-economic situation of pupils. In only a very few of the school districts was there available any "hard" data, and even there it was very scant. The apparent reason for the seeming lack of information in respect to pupils' socio-economic characteristics was that school officials are reluctant to "press" for the gathering of such information on individual pupils for fear of possible violation of privacy.
3. A third significant obstacle to the production of as complete a series of forecasts of pupil socio-economic condition was the magnitude of the monetary, manpower, and temporal resources that would be required to "unearth" and to collect the requisite information. In other words it was found that the acquisition of the data needed would be a much more massive task than had been contemplated in the beginning -- beyond the resources of

for all practical purposes, family income can and should be used as an index or indicator of the pupil's family background.

2. Another difficulty was the dearth of available and reliable information regarding the socio-economic situation of pupils. In only a very few of the school districts was there available any "hard" data, and even there it was very scant. The apparent reason for the seeming lack of information in respect to pupils' socio-economic characteristics was that school officials are reluctant to "press" for the gathering of such information on individual pupils for fear of possible violation of privacy.

3. A third significant obstacle to the production of as complete a series of forecasts of pupil socio-economic condition was the magnitude of the monetary, manpower, and temporal resources that would be required to "unearth" and to collect the requisite information. In other words it was found that the acquisition of the data needed would be a much more massive task than had been contemplated in the beginning -- beyond the resources of the Project as funded.

As a result of the difficulties outlined above, the decision was reached to limit the forecasts for this part of the Project to the future family annual incomes of the prospective enrollees in each of the same geographic statistical areas as were used for SWEP forecasts of future pupil enrollments.

## B. Derivation of Socio-Economic Indicators

As a by-product of the U.S. Census for 1970, there was available a large body of base statistics on family income in all of the various parts of Dallas and Tarrant counties. These statistics were organized by census tracts (a result of work by the North Central Texas Council of Governments and The Institute of Urban and Environmental Studies of Southern Methodist University, and by municipalities of the two core counties). It was necessary to modify the data by accumulating for each SWEP geographic statistical area the information on each municipality in the respective area and each census tract wholly or partially in each of the areas; wherever necessary, data for one of those entities was distributed to two or more SWEP statistical areas by arbitrary extrapolation and division on a geographically proportionate basis. This arbitrary distribution in the cases involved was not considered to have violated the integrity of the derived data because the cases where this was employed were so similar and so evenly scattered over the entire group of SWEP statistical areas, and the quantities so small in relation to the totals for each SWEP area, that under the principle of "off-setting balances" the error of estimate that could be attributed to this statistical strategy would be infinitesimally small.

The data derivation referred to here is that of the mean family income for all families of each of the SWEP statistical areas for the year 1969. When that had been accomplished, the forecasting of the annual mean family income for each area for 1980-81 and 1985-86 school years were the next steps. This forecast derivation was divided into two stages, in the first of which the mean family income of each statistical area for 1969 was increased by the same percentages for 1980 and 1985 as had been projected for the equivalent time period for Texas (in terms of per capita annual income) by the U.S. Dept. of extrapolation and division on a geographically proportionate basis. This arbitrary distribution in the cases involved was not considered to have violated the integrity of the derived data because the cases where this was employed were so similar and so evenly scattered over the entire group of SWEP statistical areas, and the quantities so small in relation to the totals for each SWEP area, that under the principle of "off-setting balances" the error of estimate that could be attributed to this statistical strategy would be infinitesimally small.

The data derivation referred to here is that of the mean family income for all families of each of the SWEP statistical areas for the year 1969. When that had been accomplished, the forecasting of the annual mean family income for each area for 1980-81 and 1985-86 school years were the next steps. This forecast derivation was divided into two stages, in the first of which the mean family income of each statistical area for 1969 was increased by the same percentages for 1980 and 1985 as had been projected for the equivalent time period for Texas (in terms of per capita annual income) by the U.S. Dept. of Commerce in various publications.** This process yielded for each of the SWEP areas what were considered as "raw" forecasts for the reason that they did not take into account the economic impaction of other changes that have been forecast for those areas. It then became necessary to convert these "raw" forecasts of mean family income for each separate statistical area to refined estimates of mean family income

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** A recent update based on most recent estimates from the U.S. Dept. of Commerce will be found on p. 58, U.S. News & World Report, July 15, 1974.

by adjusting and modifying the respective area's "raw" forecasts for expected added increments or reductions on the basis of one or more income-influencing factors or events likely or applicable to that particular area. For example, in one area that is 70% residentially saturated, over 60% of the remaining residential undeveloped land is platted into large lots that can be utilized for homes valued on today's market at $65,000 to $80,000; since this indicates that future in-migrants of high income will predominate among all in-migrants, the area was assigned an increment factor of 5% addition to raw estimates of mean family income for 1980 and (as the land will become more dear as saturation is approached) and 7% for 1985 on the basis of that one factor alone. Some of the factors and events that were used to adjust "raw" forecasts for conversion to refined forecasts were: number and cost of new homes expected to be built or occupied, expected continued deterioration of housing in significant size territories, nature (in respect to income) of migrants forecasted to move into and out of the area, the wage and salary levels of employment of new business and industries scheduled to move into the area, the forecasted percentages of various ethnic minorities that will be in the area in the future, and other factors that would produce any change in the population "mix" of the area in respect to income levels.

## C. Metroplex Family Income

In this part of this report is presented the refined forecasts of the mean family incomes of all families in the various statistical areas. Table P-6 shows the mean family income for all families (not quite the same as families of prospective enrollees which would be higher by certain varying amounts) in each of the SWEP geographic forecasts for conversion to refined forecasts were: number and cost of new homes expected to be built or occupied, expected continued deterioration of housing in significant size territories, nature (in respect to income) of migrants forecasted to move into and out of the area, the wage and salary levels of employment of new business and industries scheduled to move into the area, the forecasted percentages of various ethnic minorities that will be in the area in the future, and other factors that would produce any change in the population "mix" of the area in respect to income levels.

## C. Metroplex Family Income

In this part of this report is presented the refined forecasts of the mean family incomes of all families in the various statistical areas. Table P-6 shows the mean family income for *all* families (not quite the same as *families of prospective enrollees* which would be higher by certain varying amounts) in each of the SWEP geographic statistical areas and of each of the two counties for 1980-81 and 1985-86. Table P-6 also shows the percentages of prospective pupils in each area that are expected to be from families with family incomes of $6,000 or less in 1985-86 expressed in "1969 dollars". This "threshold" of $6,000 was arbitrarily chosen as "best guess" of the income level that would demarcate a family of three as being below the "poverty level".

## TABLE P-6
## INDICATORS OF RECENT AND FUTURE SOCIO-ECONOMIC STATUS OF FAMILIES OF ENROLLEES

| Areas of Pupil Residence | 1969$^{o}$ Mean Annual Family# Income* | 1980-81 Mean Annual Family# Income* | 1985-86 Mean Annual Family# Income* | 1985-86 Percent of Pupils## From Families with Annu Income \$6000 or less |
|---|---|---|---|---|
| 1 | \$ 13,206 | \$ 17,800 | \$ 19,800 | 4.8 |
| 2 | 11,559 | 15,900 | 18,100 | 8.4 |
| 3 | 10,900$^{E}$ | 14,510 | 18,085 | 2.7 |
| I | 15,600$^{E}$ | 20,200 | 22,300 | 4.9 |
| II | 12,023$^{E}$ | 15,630 | 17,200 | 8.6 |
| III | 13,090$^{E}$ | 17,500 | 19,000 | 8.0 |
| IV | 13,111$^{E}$ | 17,700 | 19,500 | 4.9 |
| V | 13,220$^{E}$ | 17,810 | 19,700 | 5.0 |
| VI | 9,912$^{E}$ | 14,000 | 15,810 | 11.1 |
| VII | 10,080$^{E}$ | 13,100 | 14,410 | 15.7 |
| VIII | 11,017$^{E}$ | 14,320 | 15,750 | 12.4 |
| 4 | 14,173 | 18,800 | 20,680 | 5.9 |
| 5 | 11,980 | 16,100 | 18,000 | 8.5 |
| 6 | 10,840 | 14,900 | 16,700 | 8.0 |
| 7 | 11,905 | 16,200 | 18,160 | 7.9 |
| 8 | 13,208 | 17,780 | 19,470 | 6.8 |
| 9 | 10,405 | 13,490 | 15,800 | 8.7 |
| 10 | 11,290 | 14,750 | 16,420 | 7.0 |
| 11 | 23,107 | 30,000 | 33,000 | 1.2 |
| 12 | 11,105 | 14,810 | 16,280 | 8.2 |
| 13 | 13,308 | 17,760 | 19,540 | 6.9 |
| 14 | 10,986 | 15,300 | 16,500 | 7.2 |
| 15 | 11,762 | 15,910 | 17,500 | 7.9 |
| 16 | 11,002 | 14,800 | 16,260 | 8.8 |
| 17 | 12,011 | 16,210 | 17,800 | 7.5 |
| 18 | 14,794 | 19,130 | 21,000 | 6.0 |
| 19 | 15,410 | 20,000 | 22,000 | 5.8 |
| 20 | 15,697 | 20,300 | 22,400 | 6.3 |
| 21 | 14,998 | 19,500 | 21,500 | 5.0 |
| 22 | 12,900$^{E}$ | 17,300 | 19,080 | 4.4 |
| 23 | 10,100$^{E}$ | 13,300 | 14,650 | 15.2 |
| Dallas County | 12,668 | 16,468 | 18,110 | 7.4 |

* in 1969

| | | | | |
|---|---|---|---|---|
| VI | 9,912 | 14,000 | 15,810 | 11.1 |
| VII | 10,080E | 13,100 | 14,410 | 15.7 |
| VIII | 11,017E | 14,320 | 15,750 | 12.4 |
| 4 | 14,173 | 18,800 | 20,680 | 5.9 |
| 5 | 11,980 | 16,100 | 18,000 | 8.5 |
| 6 | 10,840 | 14,900 | 16,700 | 8.0 |
| 7 | 11,905 | 16,200 | 18,160 | 7.9 |
| 8 | 13,208 | 17,780 | 19,470 | 6.8 |
| 9 | 10,405 | 13,490 | 15,800 | 8.7 |
| 10 | 11,290 | 14,750 | 16,420 | 7.0 |
| 11 | 23,107 | 30,000 | 33,000 | 1.2 |
| 12 | 11,105 | 14,810 | 16,280 | 8.2 |
| 13 | 13,308 | 17,760 | 19,540 | 6.9 |
| 14 | 10,986 | 15,300 | 16,500 | 7.2 |
| 15 | 11,762 | 15,910 | 17,500 | 7.9 |
| 16 | 11,002 | 14,800 | 16,260 | 8.8 |
| 17 | 12,011 | 16,210 | 17,800 | 7.5 |
| 18 | 14,794 | 19,130 | 21,000 | 6.0 |
| 19 | 15,410 | 20,000 | 22,000 | 5.8 |
| 20 | 15,697 | 20,300 | 22,400 | 6.3 |
| 21 | 14,998 | 19,500 | 21,500 | 5.0 |
| 22 | 12,900E | 17,300 | 19,080 | 4.4 |
| 23 | 10,100E | 13,300 | 14,650 | 15.2 |
| Dallas County | 12,668 | 16,468 | 18,110 | 7.4 |

* in 1969 dollars

# arithmetic weighted average for all families residing in the geographic residential area.

## projected percentage of all prospective public school pupils (Grades K-12) who reside within the designated geographic attendance areas.

o Taken or derived from Economic Potentials Handbook - Dallas/Fort Worth Metroplex, Third Edition 1973, Institute for Urban and Environmental Studies, Southern Methodist University, Dallas, and various publications of the U.S. Dept. of Commerce.

E Estimate derived by extrapolation/accumulation of source data or by comparison of other indicators (home ownership/values, pupils on free lunch, etc.).

TABLE F-6 (con't)

| Areas of Pupil Residence | $1969^{o}$ Mean Annual Family$^{\#}$ Income* | 1980-81 Mean Annual Family$^{\#}$ Income* | 1985-86 Mean Annual Family$^{\#}$ Income* | Percent of Pupils$^{\#\#}$ From Families with Ann Income $6000 or less |
|---|---|---|---|---|
| 24 | $ 12,440 | $ 16,180 | $ 17,800 | 6.7 |
| 25 | 11,965 | 15,620 | 17,700 | 6.7 |
| 26 | 12,890 | 16,800 | 18,510 | 5.1 |
| 27 | 12,677 | 16,600 | 18,480 | 5.1 |
| 28 | 9,791 | 13,200 | 14,580 | 9.9 |
| 29 | 11,175 | 14,600 | 16,060 | 6.8 |
| 30 | 13,810 | 17.930 | 18,690 | 5.0 |
| 31 | 12,700$^{E}$ | 16,640 | 18,600 | 6.1 |
| 32 | 9,998$^{E}$ | 13,380 | 14,900 | 9.8 |
| 33 | 10,583 | 13,750 | 15,120 | 8.9 |
| 34 | 11,500$^{E}$ | 15,000 | 16,700 | 7.4 |
| 35 | 10,747$^{E}$ | 14,310 | 15,800 | 7.7 |
| IX | 12,100$^{E}$ | 15,740 | 15,730 | 7.6 |
| X | 11,000$^{E}$ | 14,300 | 15,700 | 9.7 |
| XI | 12,900$^{E}$ | 16,770 | 17,500 | 7.3 |
| XII | 11,890$^{E}$ | 15,600 | 17,200 | 7.4 |
| XIII | 11,700$^{E}$ | 15,200 | 16,680 | 8.4 |
| 36 | 11,390 | 15,300 | 17,010 | 6.3 |
| 37 | 13,380 | 17,900 | 19,600 | 5.0 |
| 38 | 12,600 | 16,380 | 18,020 | 5.8 |
| 39 | 13,900$^{E}$ | 18,000 | 19,800 | 4.0 |
| 40 | 9,210 | 12,100 | 13,550 | 11.4 |
| 41 | 10,460$^{E}$ | 13,770 | 15,240 | 9.3 |
| 42 | 11,607 | 15,220 | 16,800 | 6.2 |
| 43 | 10,080 | 13,220 | 14,810 | 9.7 |
| TARRANT COUNTY | 11,490 | 15,290 | 16,940 | 8.0 |

* in 1969 dollars

# arithmetic weighted average for all families residing in the geographic resident area.

## projected percentage of all prospective public school pupils (Grades K-12) who reside within the designated geographic attendance areas.

o Taken or derived from Economic Potentials Handbook - Dallas/Fort Worth Metroplex Third Edition 1973, Institute For Urban and Environmental Studies, Southern Methodist University, Dallas, and various publications of the U.S. Dept. of Commerce.

E Estimate derived by extrapolation/accumulation of source data or by comparison

|  |  |  |  |  |
|---|---|---|---|---|
| 34 | 11,500$^E$ | 15,000 | 16,700 | 7.4 |
| 35 | 10,747$^E$ | 14,310 | 15,800 | 7.7 |
| IX | 12,100$^E$ | 15,740 | 15,730 | 7.6 |
| X | 11,000$^E$ | 14,300 | 15,700 | 9.7 |
| XI | 12,900$^E$ | 16,770 | 17,500 | 7.3 |
| XII | 11,890$^E$ | 15,600 | 17,200 | 7.4 |
| XIII | 11,700$^E$ | 15,200 | 16,680 | 8.4 |
| 36 | 11,390 | 15,300 | 17,010 | 6.3 |
| 37 | 13,380 | 17,900 | 19,600 | 5.0 |
| 38 | 12,600 | 16,380 | 18,020 | 5.8 |
| 39 | 13,900$^E$ | 18,000 | 19,800 | 4.0 |
| 40 | 9,210 | 12,100 | 13,550 | 11.4 |
| 41 | 10,460$^E$ | 13,770 | 15,240 | 9.3 |
| 42 | 11,607 | 15,220 | 16,800 | 6.2 |
| 43 | 10,080 | 13,220 | 14,810 | 9.7 |
| TARRANT COUNTY | 11,490 | 15,290 | 16,940 | 8.0 |

* in 1969 dollars

# arithmetic weighted average for all families residing in the geographic residentia area.

## projected percentage of all prospective public school pupils (Grades K-12) who reside within the designated geographic attendance areas.

o Taken or derived from Economic Potentials Handbook - Dallas/Fort Worth Metroplex, Third Edition 1973, Institute For Urban and Environmental Studies, Southern Methodist University, Dallas, and various publications of the U.S. Dept. of Commerce.

E Estimate derived by extrapolation/accumulation of source data or by comparison of other indicators (home ownership/values, pupils on free lunch, etc.).

The accompanying "ethnic socioeconomic" maps, Figures B-1 and B-2, point up visually the statistical areas that will have certain concentration levels of the two largest ethnic categories of pupil enrollees for 1985-86, and those statistical areas that will have "relative large", "slightly above average", "slightly below average", and "relatively small" percentage of pupils from families of low annual income, as indicated by the coded symbols. Comparison in these forecasts of family income (of the percentages of "low income" families with the mean family incomes shown for the respective geographic areas) will demonstrate that some areas have fewer low income families than other areas with slightly lower mean family incomes, which is contrary to what one would ordinarily expect. This same variance was in effect in 1970 when the U.S. Census showed that Tarrant County with the lower mean family income (1969 - $11,490) had a lower percentage of families with income below the poverty level (7.8%) than Dallas County which had a 1969 mean family income of $12,668 but 8.1 percent of population below poverty level income.

While the mean family income for Dallas County is forecasted to increase 42.9% (in "1969 dollars") from 1969 to 1985 and the Tarrant County mean family income to increase by 47.4% in the same 16-year period, the per capita income has been forecasted to increase in Texas by 66.1%* (in "1973 dollars") from 1973 to 1990 -- an almost comparable period. This apparent disagreement in the two indices can be reconciled when one considers the shrinkage that has been occurring, and that will continue, in family size. SWEP demographic studies took note of the fact that the mean family membership of those families having one or more children of school age would decrease from 3.94 members to an average of 3.62 family members in Dallas County and from 3.86 members to an average of 3.60 family members in Tarrant County during the period 1970 to 1985.

The preceding forecasts and the accompanying figures should be of value to any school district which has need of indicators of pupil family had a lower percentage of families with income below the poverty level (7.8%) than Dallas County which had a 1969 mean family income of $12,668 but 8.1 percent of population below poverty level income.

While the mean family income for Dallas County is forecasted to increase 42.9% (in "1969 dollars") from 1969 to 1985 and the Tarrant County mean family income to increase by 47.4% in the same 16-year period, the per capita income has been forecasted to increase in Texas by 66.1%* (in "1973 dollars") from 1973 to 1990 -- an almost comparable period. This apparent disagreement in the two indices can be reconciled when one considers the shrinkage that has been occurring, and that will continue, in family size. SWEP demographic studies took note of the fact that the mean family membership of those families having one or more children of school age would decrease from 3.94 members to an average of 3.62 family members in Dallas County and from 3.86 members to an average of 3.60 family members in Tarrant County during the period 1970 to 1985.

The preceding forecasts and the accompanying figures should be of value to any school district which has need of indicators of pupil family economic status in future years. Of course, school districts which will be contemplating the application of the SWEP school Model will find need for still more data on the prospective enrollees than has been presented in this report.

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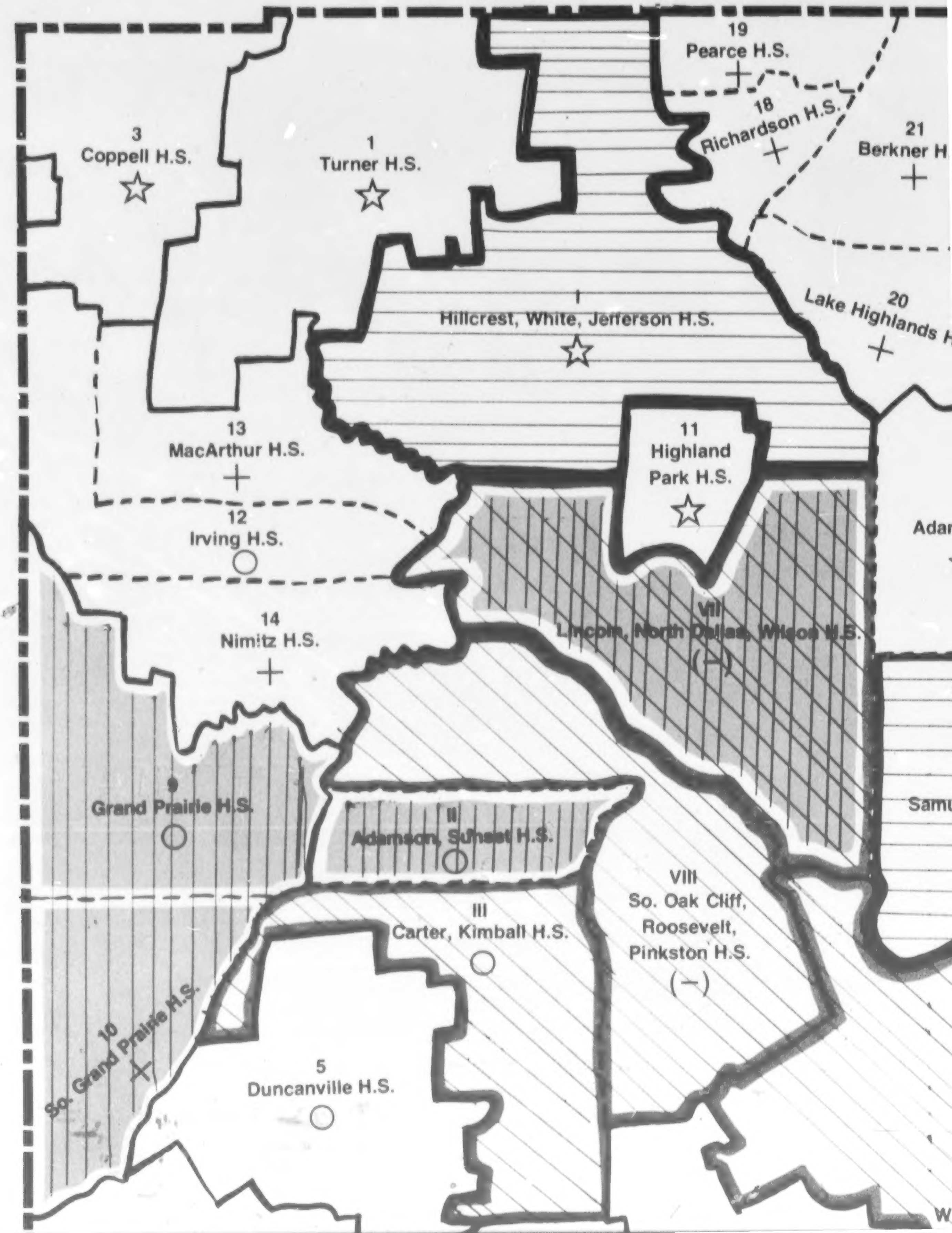
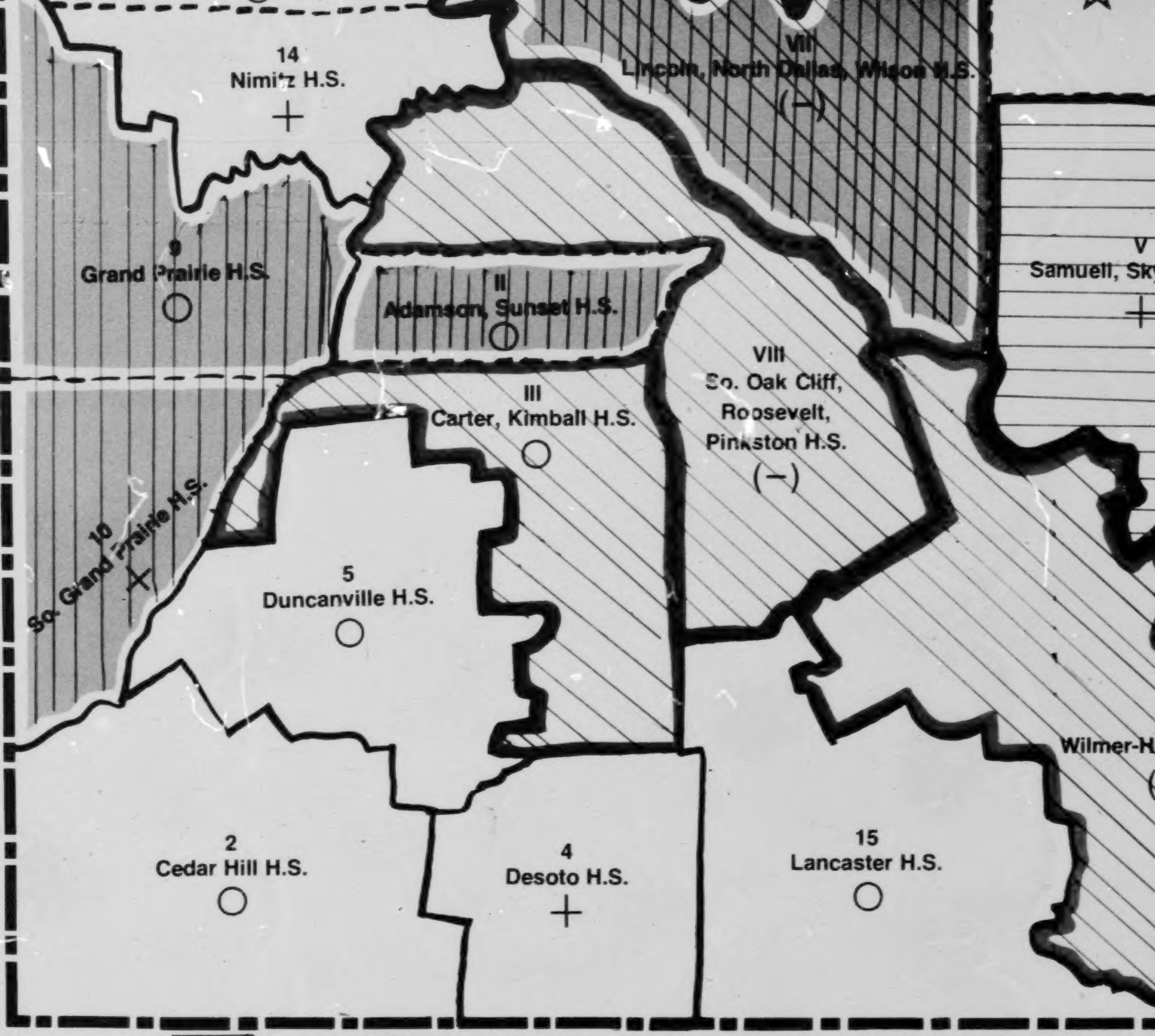
* See "Future Growth For U.S. - Where The People and Wealth Will Be", pp. 56-58, U.S. News & World Report, July 15, 1974.

FIGURE B-1
DALLAS COUNTY
ETHNIC AND SOCIO-ECONOMIC CHARACTERISTICS OF PUBLIC SCHOC
GRADES K-12, IN THE VARIOUS GEOGRAPHICAL STATISTICAL A


19
Pearce H.S.
18
Richardson H.S.
21
Berkner H.
3
Coppell H.S.
1
Turner H.S.
I
Hillcrest, White, Jefferson H.S.
20
Lake Highlands H
13
MacArthur H.S.
11
Highland
Park H.S.
12
Irving H.S.
Adar
VII
Lincoln, North Dallas, Wilson H.S.
(−)
14
Nimitz H.S.
9
Grand Prairie H.S.
II
Adamson, Sunset H.S.
Samu
VIII
So. Oak Cliff,
Roosevelt,
Pinkston H.S.
(−)
III
Carter, Kimball H.S.
10
So. Grand Prairie H.S.
5
Duncanville H.S.
W


VII
Lincoln, North Dallas, Wilson H.S.
(−)
14
Nimitz H.S.
+
V
Samuell, Sky
+
9
Grand Prairie H.S.
○
II
Adamson, Sunset H.S.
○
VIII
So. Oak Cliff,
Roosevelt,
Pinkston H.S.
(−)
III
Carter, Kimball H.S.
○
10
So. Grand Prairie H.S.
+
5
Duncanville H.S.
○
Wilmer-H
2
Cedar Hill H.S.
○
4
Desoto H.S.
+
15
Lancaster H.S.
○

▥ 12% or more of enrolled pupils Spanish-surnamed

▤ 12% to 24.9% of enrolled pupils Black

☆ Fewer than 5% of pupils from families with annual income of $6,000 or less

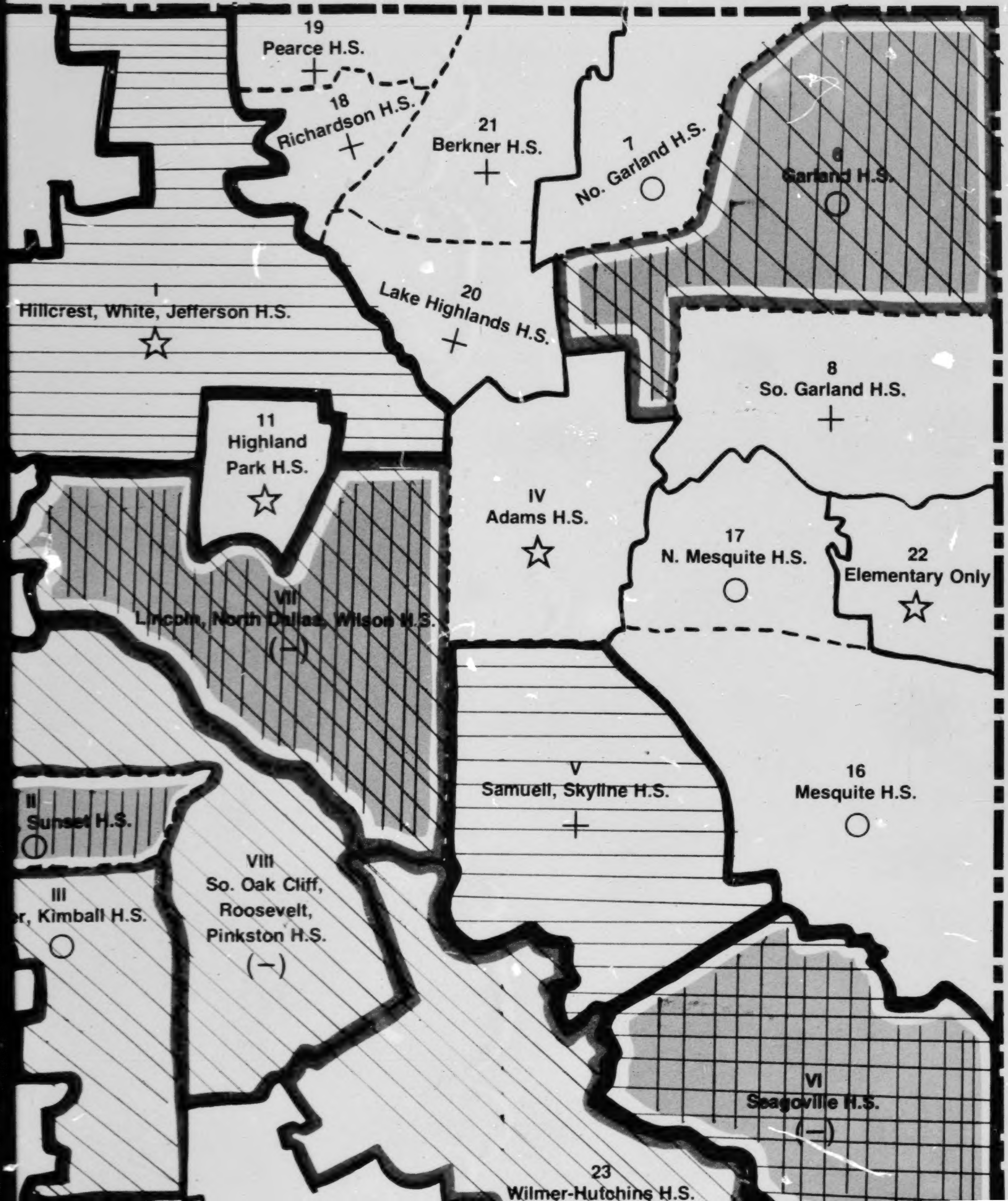
+ 5% to 7.49% of pupils from families with annual income of $6,000 or less

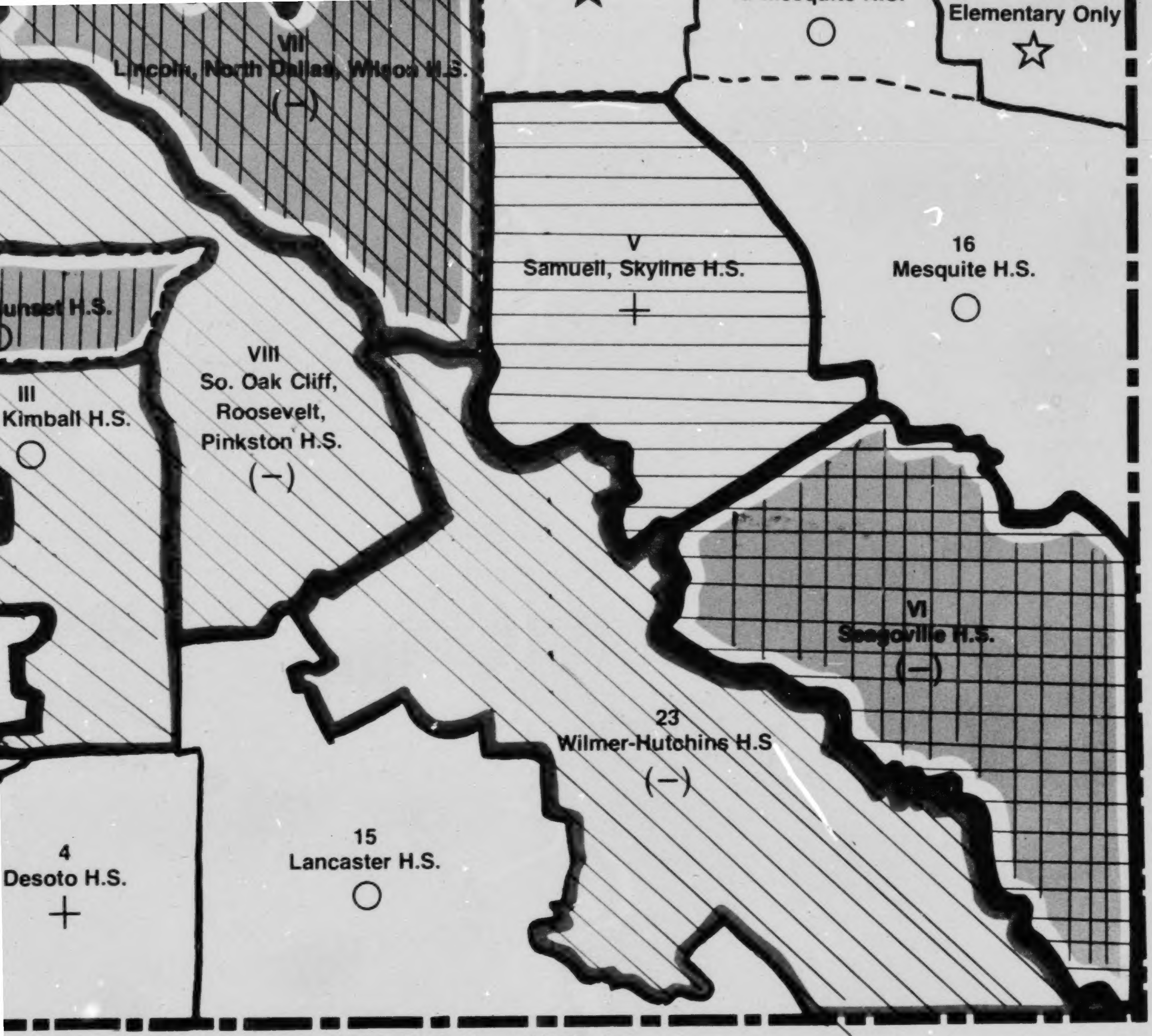
○ 7.5% to 9.99% of pupils from families with annual income of $6,000 or less

FIGURE B-1

DALLAS COUNTY

SOCIO-ECONOMIC CHARACTERISTICS OF PUBLIC SCHOOL PUPIL ENROLLEES,
K-12, IN THE VARIOUS GEOGRAPHICAL STATISTICAL AREAS — 1985-86


19
Pearce H.S.
18
Richardson H.S.
21
Berkner H.S.
7
No. Garland H.S.
6
Garland H.S.
1
Hillcrest, White, Jefferson H.S.
20
Lake Highlands H.S.
8
So. Garland H.S.
11
Highland
Park H.S.
IV
Adams H.S.
17
N. Mesquite H.S.
22
Elementary Only
VII
Lincoln, North Dallas, Wilson H.S.
(–)
V
Samuell, Skyline H.S.
16
Mesquite H.S.
II
Sunset H.S.
III
r, Kimball H.S.
VIII
So. Oak Cliff,
Roosevelt,
Pinkston H.S.
(–)
VI
Seagoville H.S.
(–)
23
Wilmer-Hutchins H.S.


Elementary Only
VII
Lincoln, North Dallas, Wilson H.S.
(−)
V
Samuell, Skyline H.S.
+
16
Mesquite H.S.
○
unset H.S.
VIII
So. Oak Cliff,
Roosevelt,
Pinkston H.S.
(−)
III
Kimball H.S.
○
VI
Seagoville H.S.
(−)
23
Wilmer-Hutchins H.S
(−)
15
Lancaster H.S.
○
4
Desoto H.S.
+

ish-surnamed

k

☆ Fewer than 5% of pupils from families with annual income of $6,000 or less

+ 5% to 7.49% of pupils from families with annual income of $6,000 or less

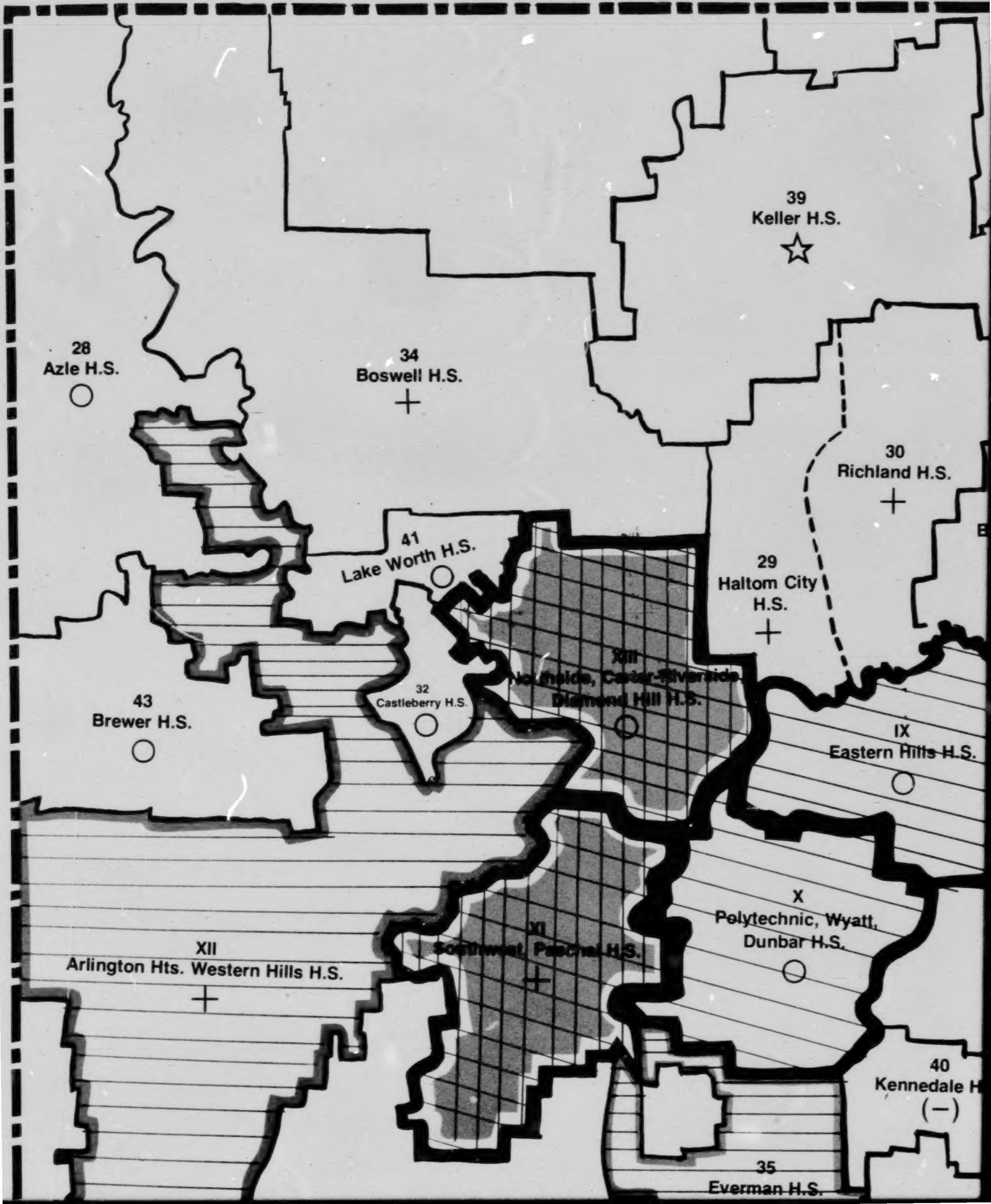
○ 7.5% to 9.99% of pupils from families with annual income of $6,000 or less

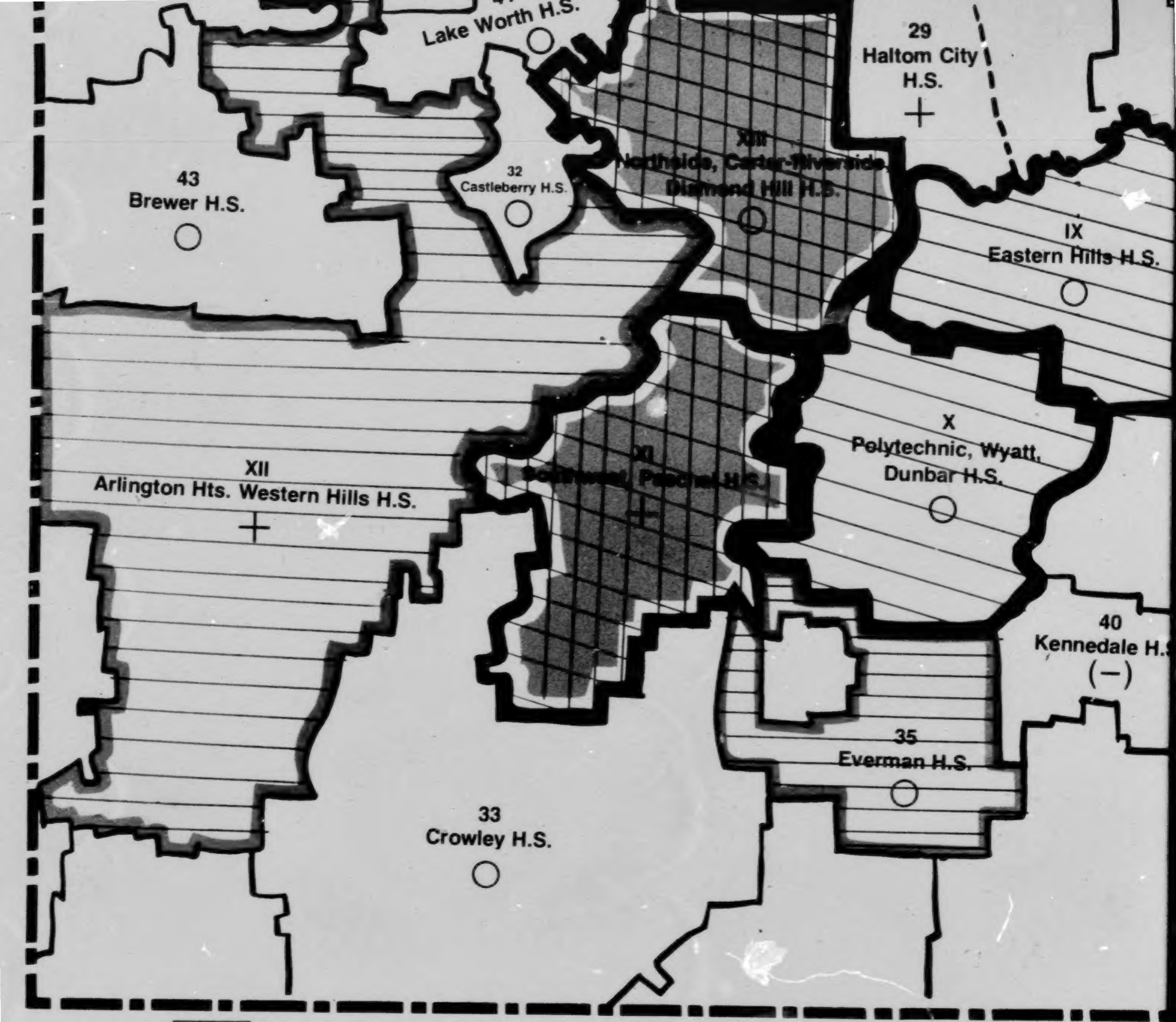
(−) 10% or more of pupils from families with annual income of $6,000 or less

FIGURE B-2

TARRANT COUNTY

ETHNIC AND SOCIO-ECONOMIC CHARACTERISTICS OF PUBLIC SCHOOL PUPIL E
GRADES K-12, IN THE VARIOUS GEOGRAPHICAL STATISTICAL AREAS —


28
Azle H.S.
34
Boswell H.S.
39
Keller H.S.
30
Richland H.S.
41
Lake Worth H.S.
29
Haltom City
H.S.
B
32
Castleberry H.S.
XIII
Northside, Carter-Riverside,
Diamond Hill H.S.
43
Brewer H.S.
IX
Eastern Hills H.S.
X
Polytechnic, Wyatt,
Dunbar H.S.
XI
Southwest, Paschal H.S.
XII
Arlington Hts. Western Hills H.S.
40
Kennedale H
(−)
35
Everman H.S.


Lake Worth H.S.
29
Haltom City
H.S.
+
XIII
Northside, Carter-Riverside,
Diamond Hill H.S.
○
32
Castleberry H.S.
○
43
Brewer H.S.
○
IX
Eastern Hills H.S.
○
X
Polytechnic, Wyatt,
Dunbar H.S.
○
XI
Southwest, Paschal H.S.
+
XII
Arlington Hts. Western Hills H.S.
+
40
Kennedale H.S
(−)
35
Everman H.S.
○
33
Crowley H.S.
○

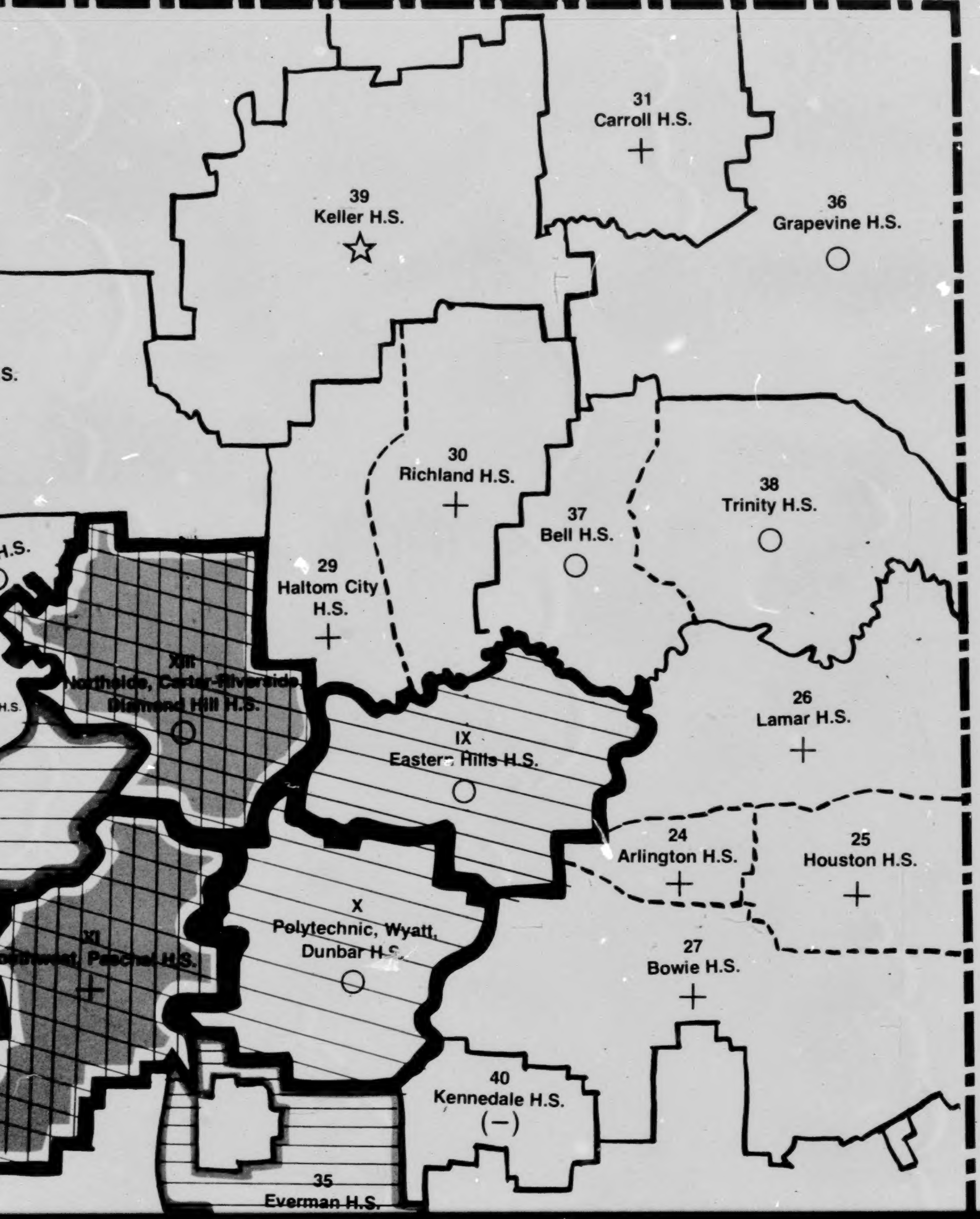
▥ 12% or more of enrolled pupils Spanish-surnamed
▤ 12% to 24.9% of enrolled pupils Bla[illegible]
▨ 25% or more of enrolled pupils Black

☆ Fewer than 5% of pupils from families with annual income of $6,000 or less
+ 5% to 7.49% of pupils from families with annual income of $6,000 or less
○ 7.5% to 9.99% of pupils from families with annual income of $6,000 or less
(−) 10% or more of pupils from families with annual income of $6,000 or less

FIGURE B-2

TARRANT COUNTY

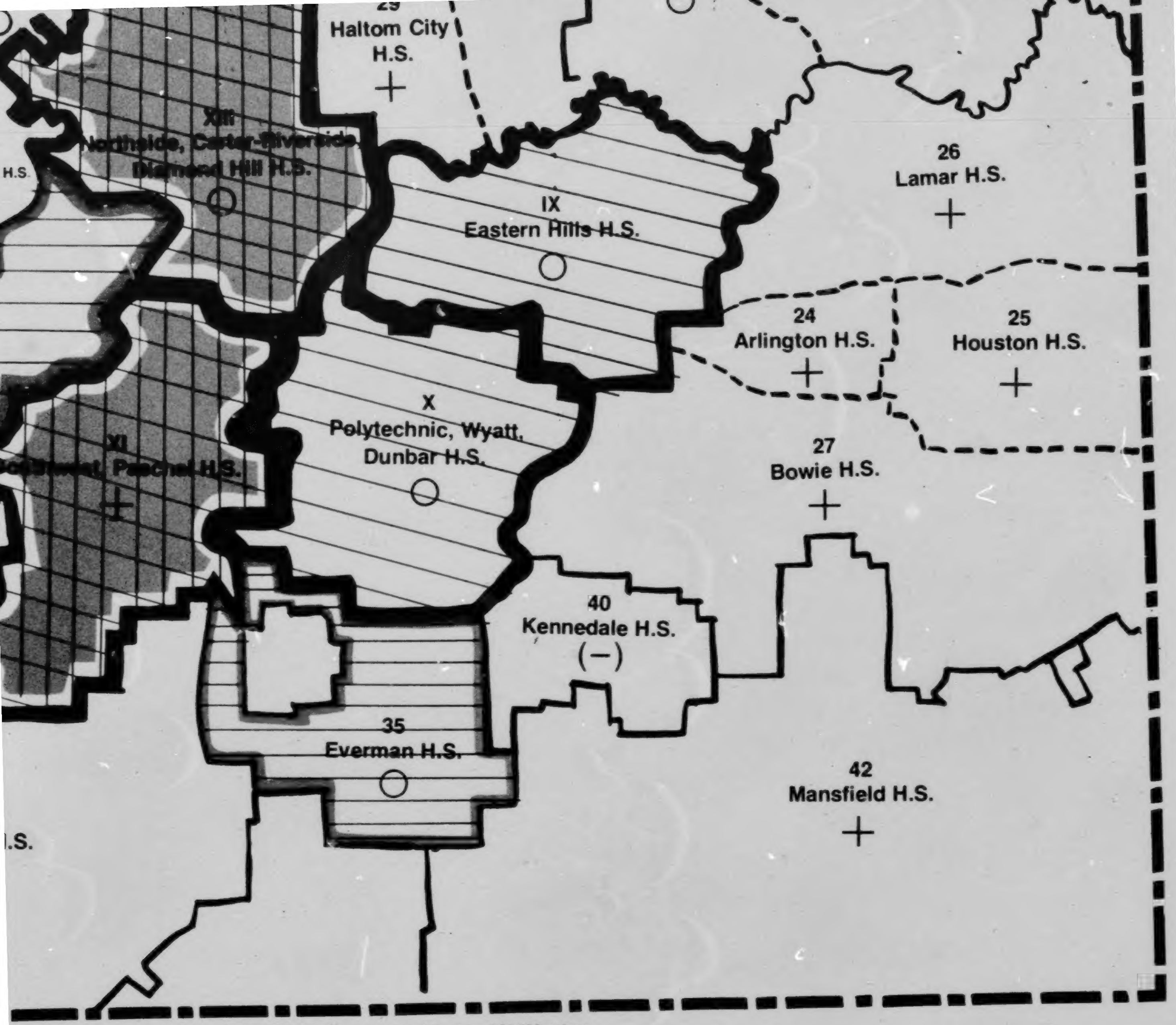
CIO-ECONOMIC CHARACTERISTICS OF PUBLIC SCHOOL PUPIL ENROLLEES,
12, IN THE VARIOUS GEOGRAPHICAL STATISTICAL AREAS — 1985-86


31
Carroll H.S.
36
Grapevine H.S.
39
Keller H.S.
S.
30
Richland H.S.
38
Trinity H.S.
37
Bell H.S.
H.S.
29
Haltom City H.S.
XIII
Northside, Carter-Riverside,
Diamond Hill H.S.
H.S.
IX
Eastern Hills H.S.
26
Lamar H.S.
24
Arlington H.S.
25
Houston H.S.
X
Polytechnic, Wyatt,
Dunbar H.S.
XI
uthwest, Paschal H.S.
27
Bowie H.S.
40
Kennedale H.S.
(−)
35
Everman H.S.

---

# APPENDIX 3.2

## A PRELIMINARY SWEP FACILITY CONFIGURATION
## RELATIVE TO CONTEMPORARY CONCEPTS OF FUTURE EDUCATION


29
Haltom City
H.S.
+
XIII
Northside, Carter-Riverside
Diamond Hill H.S.
○
H.S.
IX
Eastern Hills H.S.
○
26
Lamar H.S.
+
24
Arlington H.S.
+
25
Houston H.S.
+
X
Polytechnic, Wyatt,
Dunbar H.S.
○
XI
Southwest, Paschal H.S.
+
27
Bowie H.S.
+
40
Kennedale H.S.
(−)
35
Everman H.S.
○
42
Mansfield H.S.
+
.S.

rnamed

☆ Fewer than 5% of pupils from families with annual income of $6,000 or less
+ 5% to 7.49% of pupils from families with annual income of $6,000 or less
○ 7.5% to 9.99% of pupils from families with annual income of $6,000 or less
(−) 10% or more of pupils from families with annual income of $6,000 or less

# APPENDIX 2

## METROPLEX MANPOWER NEEDS

### Manpower Needs

A futuristic school serving the Dallas-Fort Worth Metroplex must determine that its product will be responsive to contemporary societal needs, economic environment, and manpower requirements. The consideration of this section is the identification of Metroplex manpower resources in terms of numbers, educational levels, and job classifications required for the decade of the 1980's.

Metroplex Manpower Needs -- Table I reflects data from the document, "Comprehensive Manpower Plan for the Cities of Dallas-Fort Worth and the Surrounding Area -- Fiscal Year 1974," prepared by the Office of Manpower Planning, North Central Texas Council of Governments (NCTCOG), Arlington, Texas.

Information reported by NCTCOG for the Dallas Standard Metropolitan Statistical Area (SMSA) and the Fort Worth SMSA have been combined in Table I.

TABLE I

| | | | | | |
|---|---|---|---|---|---|
| FUTURE MANPOWER REQUIREMENTS AND POTENTIAL LABOR MARKET ENTRANTS BY YEARS OF SCHOOL COMPLETED FOR THE COMBINED DALLAS-FORT WORTH STANDARD METROPOLITAN STATISTICAL AREA | | | | | |
| YEAR 1980 | EMPLOYMENT REQUIREMENTS | | | | |
| | EXPANSION<br>35,780 | REPLACEMENTS<br>26,789 | TOTAL<br>62,569 | | |
| YEAR 1980 | EMPLOYMENT REQUIREMENT BY YEARS OF SCHOOL COMPLETED | | | | |
| | LESS THAN HIGH SCHOOL | 4 YEARS HIGH SCHOOL | 1-3 YEARS COLLEGE | 4 YEARS COLLEGE | 5 YEARS COLLEGE |
| | 20,281 | 24,726 | 8,763 | 5,320 | 3,505 |

(NCTCOG), Arlington, Texas.

Information reported by NCTCOG for the Dallas Standard Metropolitan Statistical Area (SMSA) and the Fort Worth SMSA have been combined in Table I.

TABLE I

FUTURE MANPOWER REQUIREMENTS AND POTENTIAL LABOR MARKET ENTRANTS BY YEARS OF SCHOOL COMPLETED FOR THE COMBINED DALLAS-FORT WORTH STANDARD METROPOLITAN STATISTICAL AREA

| YEAR 1980 | EMPLOYMENT REQUIREMENTS | | | |
|---|---|---|---|---|
| | EXPANSION<br>35,780 | REPLACEMENTS<br>26,789 | TOTAL<br>62,569 | |

| YEAR 1980 | EMPLOYMENT REQUIREMENT BY YEARS OF SCHOOL COMPLETED | | | | |
|---|---|---|---|---|---|
| | LESS THAN HIGH SCHOOL | 4 YEARS HIGH SCHOOL | 1-3 YEARS COLLEGE | 4 YEARS COLLEGE | 5 YEARS COLLEGE |
| | 20,281 | 24,726 | 8,763 | 5,320 | 3,505 |

| YEAR 1980 | POTENTIAL WORK FORCE ENTRANTS | | | | |
|---|---|---|---|---|---|
| | LESS THAN HIGH SCHOOL | 4 YEARS HIGH SCHOOL | 1-3 YEARS COLLEGE | 4 YEARS COLLEGE | 5 YEARS COLLEGE |
| | 6,158 | 15,890 | 12,563 | 6,600 | 2,287 |

This table reveals that the labor force potential for the year 1980 is 43,498 or 70.15% of the projected labor requirement for that year. The differences between the classifications of "Employment Requirement By Years of School Completed" and the "Potential Work Force Entrants" are as follows: 69.7% less than the need for the "Less Than High School Education" category; 35.8% less than the need for the "Four Years of High School" category; 46.36% more than the need for the "1-3 Years of College" category. Further, the potential work force entrants are 46.36% more than the need for the educational category "Four Years College", and 34.76% less than the need for the "Five Years College" category.

Manpower Needs by Occupation -- Table II is extrapolated from the document "Total Employment Requirements by Occupation in the Dallas and Fort Worth SMSA," prepared by the Office of Manpower Planning, North Central Texas Council of Governments. For brevity, occupational subcategories are not shown, and only broad occupational categories are presented.

TABLE II

TOTAL EMPLOYMENT REQUIREMENTS BY OCCUPATION IN THE DALLAS-FORT WORTH
STANDARD METROPOLITAN STATISTICAL AREA
1970-1980

| OCCUPATION | DALLAS-FORT WORTH SMSA | | |
|---|---|---|---|
| | EXPANSION [1*] REQUIREMENTS 1970-1980 | REPLACEMENT[2*] REQUIREMENTS 1970-1980 | TOTAL [3*] REQUIREMENTS 1970-1980 |
| Total Employment | 317,320 | 211,042 | 528,362 |
| Professional, technical, kindred | 63,438 | 26,094 | 89,532 |
| Managers, officials, proprietors | 25,635 | 25,371 | 51,006 |
| Clerical and kindred workers | 64,476 | 42,533 | 107,009 |
| Sales workers | 21,840 | 16,159 | 37,999 |

Fort Worth SMSA," prepared by the Office of Manpower Planning, North Central Texas Council of Governments. For brevity, occupational subcategories are not shown, and only broad occupational categories are presented.

TABLE II

TOTAL EMPLOYMENT REQUIREMENTS BY OCCUPATION IN THE DALLAS-FORT WORTH STANDARD METROPOLITAN STATISTICAL AREA 1970-1980

| OCCUPATION | DALLAS-FORT WORTH SMSA | | |
|---|---|---|---|
| | EXPANSION REQUIREMENTS 1970-1980 [1]* | REPLACEMENT REQUIREMENTS 1970-1980 [2]* | TOTAL REQUIREMENTS 1970-1980 [3]* |
| Total Employment | 317,320 | 211,042 | 528,362 |
| Professional, technical, kindred | 63,438 | 26,094 | 89,532 |
| Managers, officials, proprietors | 25,635 | 25,371 | 51,006 |
| Clerical and kindred workers | 64,476 | 42,533 | 107,009 |
| Sales workers | 21,840 | 16,159 | 37,999 |
| Craftsman, foreman, and kindred | 39,664 | 27,981 | 67,645 |
| Operatives and kindred workers | 41,702 | 37,552 | 79,254 |
| Service workers | 45,854 | 24,858 | 70,712 |
| Laborers (and farm workers) | 3,164 | 9,944 | 13,108 |
| Farmers and farm workers | 554 | 317 | 871 |

---

* Footnotes 1, 2, and 3 are continued on the following page.

---

1. Expansion requirements represent the growth in requirements by occupation for 1970-1980.
2. Replacement requirements assume an annual replacement rate of two per cent (2%) for each occupation.
3. Total employment requirements represent both expansion and replacement requirements for 1970-1980.

Factors Influencing Manpower Needs -- Many factors will influence the labor market in the year 1980, such as the availability of energy and material resources, the nature of the society, business cycles, Federal fiscal policies, international monetary and trade policies, national politics and concomitant social programs. Therefore, the school of the future must be prepared to meet the many contingencies that will exist in the labor market and prepare an adaptable student who will, through his schooling, have the necessary skills and knowledge to cope with what may well be a continuously changing world of work.

An example of such factors influencing future manpower needs are compulsory retirement (usually at age 65), liberalized early retirement, and extended life expectancies. These can be expected to produce major changes in manpower needs and in corresponding educational needs.

To pursue the example of retirement factors further and to obtain a broader perspective of just this single factor, consider that in 1973 over 70 percent of the men who retired were under 65! And wives retired generally at earlier ages than did husbands -- so much earlier that while the 1973 male retirees could look forward to spending nearly one-fourth of their lives in retirement, women could expect to spend about one-third of their lifetimes in this phase! And all indications portend even more liberal retirement in the future society.

## APPENDIX 3.1

## INITIAL FACILITY CONCEPTUAL DATA

MEMO

DALLAS INDEPENDENT SCHOOL DISTRICT
SCHOOL ADMINISTRATION BUILDING 3700 ROSS AVE.

August 21, 1973

SWEP Team

: Survey

In our meeting of August 20, I suggested that a conventional survey for "defining" SWEP would produce conventional answers. As an alternative or control, I suggested a survey of the people who could be most impacted by SWEP. Such a survey could produce "biased" results, however, in that these people are not necessarily familiar with "the problem."

Accordingly, I suggested use of the attached. This is a very brief document designed to hold the readers' attention while communicating a SWEP concept. The readers' reaction to the concept, which they are to provide as a Conclusion to the story, should provide us with determinitive data for planning. The Conclusion will be printed on heavier stock, the back of which will make it serve as a self-addressed, pre-paid mailer. To minimize bias, I recommend the mailer show a post office box address outside the region.

I envision the document be distributed to five sample groups in the region described:

(1) engineering-oriented 12 grade through college seniors, representing a conservative but visionary faction

(2) social science-oriented 11th grade through college juniors, representing idealists and visionaries.

(3) public school teachers/administrators, representing conservatism and realism in educational system change

(4) college education majors, representing the next generation of any change in school systems

(5) leaders/planners in business/industry, representing persons most knowledgeable of regional trends.

Some combination of 3, 4 and 5 could serve as a control for the survey.

The document and survey are merely my concepts for an approach to defining SWEP. The story should be rewritten by public relations or science fiction-types, not technical writers. The survey would best be prepared by Robert Burns and/or his associates to best serve our purposes.

Your reaction to this will be appreciated.

Sincerely,

Allen Feder

region described:

(1) engineering-oriented 12 grade through college seniors, representing a conservative but visionary faction

(2) social science-oriented 11th grade through college juniors, representing idealists and visionaries.

(3) public school teachers/administrators, representing conservatism and realism in educational system change

(4) college education majors, representing the next generation of any change in school systems

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The document and survey are merely my concepts for an approach to defining SWEP. The story should be rewritten by public relations or science fiction-types, not technical writers. The survey would best be prepared by Robert Burns and/or his associates to best serve our purposes.

Your reaction to this will be appreciated.

Sincerely,

Allen Feder
Facilities Engineer

# HOW DOES IT SOUND TO YOU?

The following pages include a very short story. What you read is presently fiction, but it could come true. The extent to which it will become true will have a major impact on you. It will affect you as a parent. It will affect you in that you, as a parent, will have to be concerned with what becomes of your children. It will affect you because directly, you are going to be billed in dollars, for what is described. You can't avoid it.

We want to know what you think of the story. We have made it easy for you to tell us. To tell us, just make check marks in the appropriate spaces on the last page. Then tear it off and drop it in a mailbox. Do this before December 1, 1973.

## I

## Prologue

The dictionary tells us that the Sophists were wise men, thinkers, philosophers who lived in what is now Greece, five centuries before the birth of Christ. The term sophist now applies to any wise man or thinker. But it can also apply to a person who is a fool in his reasoning.

The term has led to such words as "sophomore," "sophisticated," and "philosophy." Here we have used it for the name of an exciting, futuristic concept in training for living. It is not a school, as you know schools to be. But we had fun calling this training concept SOFIST: School Of Future for Intermediate and Secondary Training.

## II

## You and the Year 2000

It is the year 2000. You are of middle age. Two of your children are in high school, one is in elementary school. The courts, social pressures and economics have erased many school district boundaries and traces of segregation. For all intensive purposes, the north Texas region from Rockwall, east of Dallas to Weatherford, west of Ft. Worth can be thought of as a region uniform in tax base, policies and procedures, and racial mix. Economic differences are the result of choice, opportunity and aptitude, no[illegible]tom.

The population of the region is huge. In less than three decades it has grown to over 2½ million. Most of these people live in the area around the Dallas-Ft. Worth Regional Airport. But there are no transportation problems for those living in even the farthest outskirts of the region. Superhighways and pollution-free high speed mass transportation has made it possible for people to rapidly commute between home and work sites separated by distances of 75 to 100 miles. Leisure time and work time occupy equal portions of the year so there is high speed access to the Gulf beaches, area lakes and the Ozarks.

The availability of good public transportation; the zoning of industrial and business clusters far from residences for both pollution and noise control; advances in central heating/air conditioning, sattelited, common, low pollution plants; and a new appreciation for natural and aesthetic landscaping finds much of the high density population living comfortably in park-like apartment and townhouse complexes. In each residence, luxurious dreams of the 1970's are commonplace. The housewife rarely exists as such. Women's liberation has been realized. During the day, the woman is an active part of the work force. When the family comes together at the dinner hour, pre-packaged dinners, selected by push button and microwave-cooked in minutes are automatically shuttled into the eating area on demand. The remote heating/air conditioning plants, and baseboard air handling systems in each residence have minimized or eliminated the need for dusting and vaccuming. Disposable paper clothes have made laundry chores a monthly or semi-annual chore. Home entertainment centers -- with the viewers' ability to select viewing and listening fares -- and videotelephones have seen travel for entertainment, shopping and social purposes become relatively rare occasions.

## III

## The Impact of Your Way of Life

The population has grown huge. Who will care for all these people when they are ill? Fathers and mothers are equal members in the work force. Who is home to teach the sons how to be fathers, the daughters how to be mothers; how to live, work and even play? The number and types of appliances and luxury items are varied and huge: videotelephones, microwave ovens, air handling devices, mass transportation systems, recreation items like boats and swimming pools. Who will build, transport, install and service these?

SOFIST is intended to answer these questions.

## IV

## SOFIST

SOFIST is an education complex. It exists as a central campus located between the Dallas-Ft. Worth Regional Airport and the western boundary of Dallas, but has sattelite "career clusters" for each type business/industrial concentration of the region, "out where the action is." For example, the medical cluster is located near the Parkland Hospital/St. Paul Hospital/Southwestern Medical School sites in Dallas. The heavy metal fabrication cluster is located in the Trinity Industrial section of Ft. Worth.

SOFIST consists of three divisions. The Domestic Arts Division has programs for developing the whole individual. Its courses include modules or learning programs in aesthetics (art/music/literature appreciation), and the necessities of life (comparative shopping, family living, filling out job applications, personal hygiene, and social etiquette).

The Careers Division has three Departments; Implementation, Services, and Recreation. Implementation will include those clusters that emphasize the creation of products. Plastics technology and metals technology will be typical of these. The Services Department will include such clusters as Medical Technology, Appliance Repair and Television Program production. The Recreation Department will include clusters such as Food Services, Hotel/Motel Management, and Park/Conservation Management.The Careers Division will replicate much of Dallas Independent School District's Skyline Career Development Center (CDC) in such respects as student advancement on the basis of accomplishment of behavioral objectives. Unlike CDC, however. each cluster will not only include the primary career-oriented training, but also ancillary subjects. Thus, a student enrolled in, e.g. the Electronics Cluster, will receive special English courses that include the preparation and interpretation of technical reports in addition to the "required Shakespeare," and math courses that emphasize mathematics most critical in electronics.

SOFIST will be operated independent of student chronological age restraints. It will accept any student prepared by elementary training to a level of maturity, comprehension, learning aptitude, and career awareness that is pertinent to that student's career interest. It will process that student into a "productive member of the community", or to a level ready for advanced training in an institution of higher learning. By explanation given previously, "productive member of the community" implies the social and cultural facets of the individual in addition to his or her ability to engage successfully in "the world of work".

# V

## Conclusion

(Fill me out with X marks, Tear me off, Throw me in the Mailbox)

1. I believe the description of living in the year 2000 is
   - far out ☐
   - right on ☐
   - square ☐

2. Schools will have to take over more training of children presently provided by fathers and mothers.
   - True ☐
   - False ☐

3. School districts, governments will never be able to get together to permit a complex like SOFIST.
   - True ☐
   - False ☐

4. SOFIST is too broad in scope. I think the needs in the year 2000 will be better served by small, community specialist schools.
   - True ☐
   - False ☐

ETC.

I am a high school:
- Junior ☐
- Senior ☐

I am a college:
- Freshman ☐
- Sophomore ☐
- Junior ☐
- Senior ☐

I wish to be an:
- Engineer ☐
- Social Worker ☐
- Teacher ☐

ETC.

The configuration of SWEP facilities should indeed be consequent to numerous, more significant planning factors. However, it is recognized that the nature of SWEP facilities will impace program objectives. It therefore appears productive to break into this iterative circle to provide a "take-off" point from which definitive planning could proceed. This is the intent of this paper.

It is expected that much that is written here will be refuted as the program staff generates definitive data, and sound conclusions are developed from these. Certainly the relatively few data sources that researched by this writer in these first few weeks of the program, and the "one-man's" premises that are given, are not expected to be representative of program final products.

### 1. Sources

Two publications provided certain thrust of this paper, while the "civil engineering" type inputs are from the writer's training, reading and experience in the field. The two publications include for advancing education that are the products of thinking and action by perhaps most of this nation's pertinently qualified authorities. There publications are:

Postman, N. and Weingartner, C., "Teaching as a Dubversive Activity."
Dell Publishing Co., New York, N.Y.

Educational Facilities Laboratories, "The Greening of the High School"
New York, N.Y. 10022

Though the latter publication does refer to the former, the "contributions" of different authorities appear in each. The former impressed this writer as considerably the more philosophical of the two. Despite this, both publications' "messages for the future" were in amazing agreement. Interpretations from this agreement follow.

## 2. SWEP Facilities Configuration

General SWEP facilities will be included in a main campus building complex, plus satellite buildings serving each career cluster*.

### 2.1 Satellite Buildings

The satellite building will be located with respect to each center of career type activity of educational interest in the SWEP-served region. In some cases, these satellites will be in the business offices/stores/ laboratories/factories themselves. In other cases they will be in "rented" space, portable buildings, or even trailers set up for the purpose. They will rarely merit new construction. This satellite facility approach will provide viability and economy as careers and activity centers change within the region. The same career cluster program could be given in several widely scattered satellite locations simltaneously to best serve an industry.

The satellite approach will:

A. Place the student "where the action is" as far as his/her career is concerned.

B. Decrease the gap between education and the community.

C. Provide a realistic program setting for phasing between formal and on-the-job training.

### 2.2 The Main Campus Complex

This SWEP component will be situated at the student population/transportation hub of the region. It will house SWEP administration, and all the program activities that do not lend themselves to the satellites*. Its facilities are described in Section 3.

*As defined in memo of August 21, 1973 by A. Feder (Note: for SWEP 1st Quarter Report, this memo is Appendix 6.)

** Ibid, pg.1

*** See memo of August 27, 1973 by A. Feder

## 3. The Main Campus Complex (MCC)

The MCC may have to be specially built set of structures. If so, economy will have to be considered, so the curtain walls would likely be poured (concrete?) or pre-fabricated panels. For climate control purposes poured walls would have little window space, while panelled walls could be almost entirely structural glass (or plastic). To compensate for the austere appearance resulting in either case, individual wall sections will be short (e.g. many small court areas as per the Eastfield College and Skyline Center facilities), while opaque sections are likely to be in various pastel colors and/or murals and frescos (e.g. as in the Univ. of Mexico). Rooflines may be irregular, and "airy" archways may connect building components. Such a plan will permit outside lawn and park features to flow into the campus to offset the impression of crowding by a relatively large student/staff density.

### 3.1 External Features

The park-like campus will have an outer ring of parking areas. Based on Skyline Center experience, and SMSA income factors**, despite the likelihood of students/staff being on campus "in shifts", there will be sufficient space for one vehicle per staff member, and one per each three students registered.

### 3.2 Internal Structure

Modular panels (e.g. of paper honeycomb, blown polystyrene, pearlite) will predominate for providing flexible internal compartmentation. This will be needed because most room sizes and arrangements will have to be

---

*Ibid, pg. 1

**See memo of August 27, 1973 by A. Feder altered relatively continuously with the dynamic program and class size changes. Consequently, building structures predominating will be of the monocoque, geodesic, or light structural frame (e.g. aircraft hanger) type giving rise to curved surfaces. Positive internal air pressure may be used to support roofs spanning larger areas (e.g. Houston Astrodome). This will be compatible with the climate control system.

The three types of structure will characterize single story portions of the complex (e.g. auditoriums, gymnasiums).

Internal structural framing will be consequent to multi-story activities. Such activities could be represented by instruction in (e.g. electronics) fundamentals. Here, the laboratory could be on a "second" floor, electronics drafting and lecture rooms on the ground floor, with special "utilities" (e.g. power converters) on a mezzanine floor between. This arrangement is used in the Semiconductor Assembly Building of Texas Instruments Inc. main complex and has provided great flexibility, economy and rapidity in changing process and product lines.

### 3.2.1 Construction Cost Considerations

The internal structural frame is the most costly of the construction types mentioned. Its advantages are in the classroom/lab/shop arrangement described above, that is in the reduction in distance between components of facilities where distance is important. Its disadvantage, in addition to cost, is that internal structural members tend to limit the flexibility in room size and arrangement.

The alternative to internal structural framing is to cover a large ground surface area with single story buildings, which could be costly in terms of land acquisition and preparation and the sacrifice of some component "proximity". Therefore, SWEP geographic location could be a major determining factor in the specification of its structure(s).

### 3.3 Communications

In the geometric center of the MCC will be a central transceiving tower. The various satellite buildings, and even building portions of the MCC, will have more unobtrusive transceivers focussed toward this. These features will represent the visible expression of an extensive laser inter-communication system. Laser links will be used because their large bandwidth will serve the large data rate to be expected while avoiding the interference that could be expected with less directional (e.g. microwave) systems, and the cost and rigidity of hard wire (e.g. telephone) systems.

The aforementioned large data rate will be consequent to certain SWEP features. For example, student course enrollment data and progress information will be quite like that now used in the Skyline Career Development Center (CDC)*. Unlike CDC's current system, however, SWEP-instructor inputs on student progress will be made in practically "real time" via a terminal in each learning area. Student identification for progress reporting, location in the complex and any ADA-type purposes will be handled through the same terminal link by (e.g. the students inserting their "mag ID" cards into the terminal when entering an area for instruction or presenting progress data to the instructor for recording).

The same terminals will serve for instructors' communication with the "central office", while less sophisticated terminals in selected instruction areas will serve the students for "computerized instruction".**

### 3.4 People Movement

Regardless of whether MCC buildings are single or multi-story, and despite students moving between instructional areas on a non-scheduled basis, certain high traffic periods will occur in almost a random manner vertically (in multi-story buildings) and/or horizontally. Therefore, key stations in multistory buildings will have escalators. Key stations for horizontal movement between MCC components will be interconnected by conventional walkways and multiple parallel adjacent "moving sidewalks". These will include a high speed unit for rapid travel between distant points in the center, and incrementally slower speed units toward the sides, for providing easy "on and off" and casual travel. (Relatively high speed moving sidewalk units have been in operation in Los Angeles International Airport for the past decade.)

---

* See Section 7, Dallas Independent School District, "Skyline Career Development Center Annual Report, 1971-72".

** This could be as part of the "Telecomputer Grid" program in current development

The vertical and horizontal mass people movers, supplemented by the conventional walkways and ramps will be particularly useful in facilitating educational programs for physically handicapped and older members of the community. (Such persons will represent a much greater percentage of the SWEP student population than is true for current educational programs.)

3.5 The Nursery School(s)

Many mothers of young children will be enrolled in SWEP. Because the mothers will be young, the children will be young. Because the present type of provisions for child care could deny some mothers education, SWEP will provide for such child care and education. The nursery school component of SWEP will serve an additional function. These will serve as a laboratory for the Child Development cluster* of the SWEP program, - as a laboratory for instruction in child psychology and in teaching mother/child family relationships.**

3.6 Recreation and Rest/Study areas

The informal nature of the SWEP program and structural and ecological considerations indicate SWEP will include a distribution of several indoor and outdoor recreation and rest/study areas, rather than a single student lounge area as in Skyline Center and even Eastfield College.

Certain of the recreation areas will also serve parts of any SWEP physical education program (e.g. swimming pool(s)), the recreation cluster***, and community involvement (e.g. playing fields).

The rest/study areas will be distributed primarily near key transportation stations to serve students between "classes", and as supplements to the food, library and clinical services of the MCC. With regard to the library services function the rest/study areas will include videotelephone communication with the central library (computer) for quick reference purposes. With regard to the clinical services function, videotelephone communication will permit bringing aid to someone requiring it, essentially throughout the MCC area, rather than requiring that person to be moved to the clinic.

3.7 Food Service

Rather than a single large lunchroom or cafeteria, the MCC will have several small/medium sized restaurant areas, possibly in conjunction with (some of) the above rest/recreation areas. Each restaurant area will have a unique ecor and type of cuisine. All will be serviced from a central food preparation rea that will also serve for Food Services cluster training. The products of his central facility will be packaged and preserved by freezing or radiation. hey will be selected by a "customer", heated and dispensed via a push button ontrol system in each area. The control system will tie into the MCC central omputer for statistical and inventory purposes.

---

* As per the Skyline CDC program's orientation

** Coleman, James S.: "How Do The Young Become Adults?", Phi Delta Kappan, December, 197

*** Ibid, page 1

### .8 Shopping Mall

A central feature of the MCC will be a shopping mall, containing a variety f stores and such features as professional offices (e.g. optometrist, dentist) nd theaters. These will have a primary function of being a convenience to MCC tudents and staff. As a secondary function they will serve for career training f SWEP students.

### . Recapitulation

The foregoing is by no means a complete description of one SWEP possibility rom a facilities point of view. In its broadest aspects SWEP could include student operated) service stations, banks, motels and a host of other components o make it a community in itself. This would satisfy one trend suggested by the eferences, that the secondary schools' role in the future will be to provide a ransformation of students from elementary level capabilities to successful articipation in all aspects of real life.

# APPENDIX 3.3

## SUMMARY OF PRESENTATION GIVEN TO SWEP STAFF CONCERNING VISITS TO CARVER, NOVA, AND DE VRY FACILITIES

## 1. Introduction

During the period January 18-23, 1974 the SWEP Project Senior Engineer--Research visited George Washington Carver School (Carver), New Orleans, Louisiana; Nova School (Nova), Ft. Lauderdale, Florida; and De Vry Institute (De Vry), Phoenix, Arizona. The visiting was based on data presented in Appendix 5, Quarterly Report No. 1, SWEP Project.

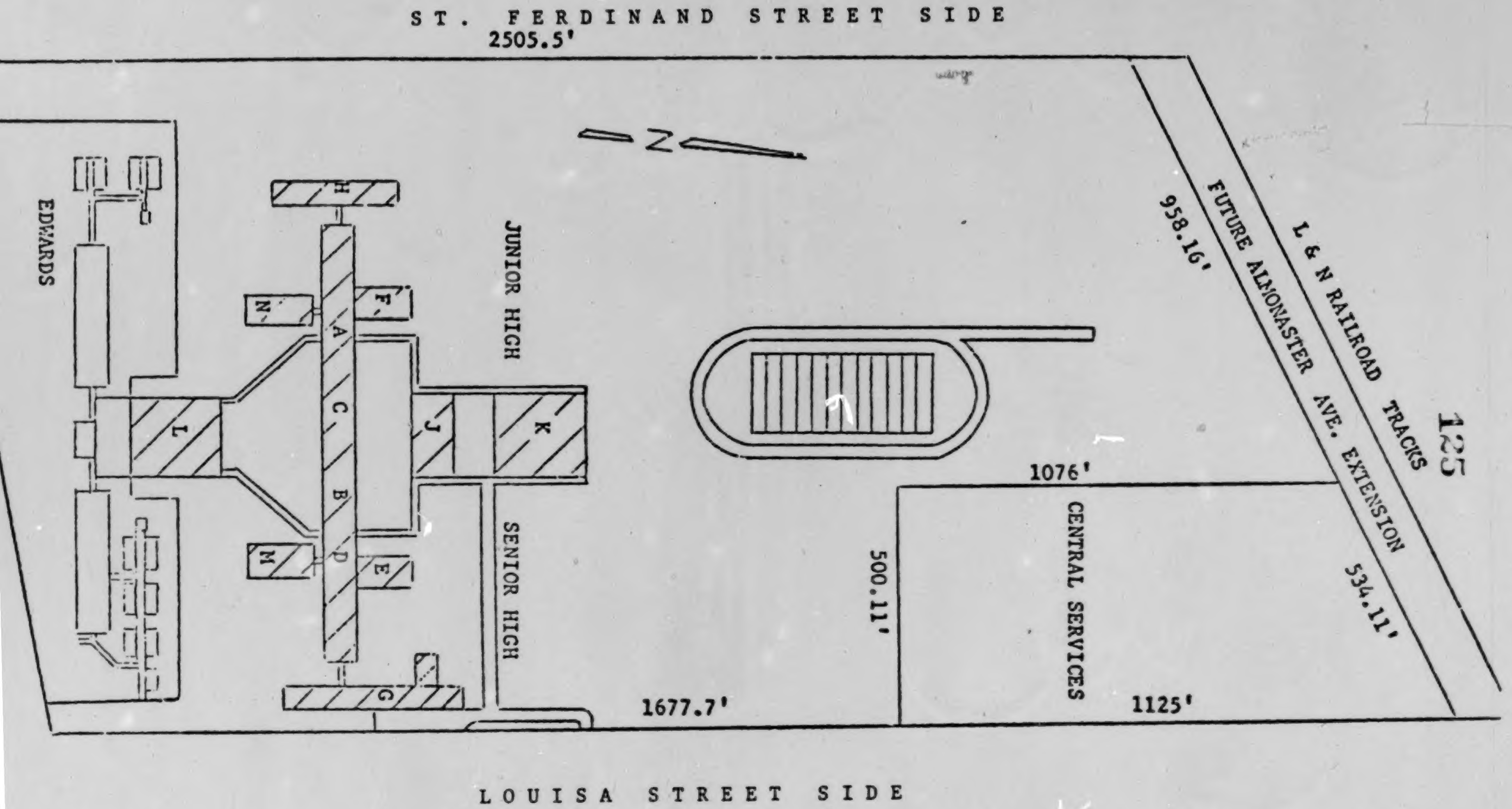
Much valuable information, including building plans (see Figures 1-3) were obtained. These, and details of the visit were presented to the SWEP staff, for information purposes, in a meeting held January 28, 1974. This appendix includes points of the presentation that stimulated staff discussion and/or that the Senior Engineer thought were of particular interest.

The SWEP Senior Engineer expressed particular appreciation to Dr. Matthew Proctor, Supervising Principal, Carver; Dr. Warren Smith, Director, Nova; and Mr. Robert Hess, President, De Vry and their supporting staff members, for the high level of cooperation given SWEP in its endeavors to improve education.

## 2. George Washington Carver School, New Orleans, Louisiana

According to Dr. Harold Gores, President, Educational Facilities Laboratory, this is one of the true education parks in the United States. It was developed primarily for promoting desegregation. It is located adjacent to the Desire Housing Project in New Orleans. At the time the school buildings were completed and occupied, the Desire Housing Project, originally consisting of a 50-50 mix of Whites and Blacks, had gone totally Black. So the initial purpose for promoting desegregation no longer was possible. The school now serves a totally Black student body.

The school consists of an elementary, middle, and a senior high school. The elementary school goes under the name of Edwards. The elementary school has about 1100 students, the middle school has 1800 students, and the senior school has 2000 students.

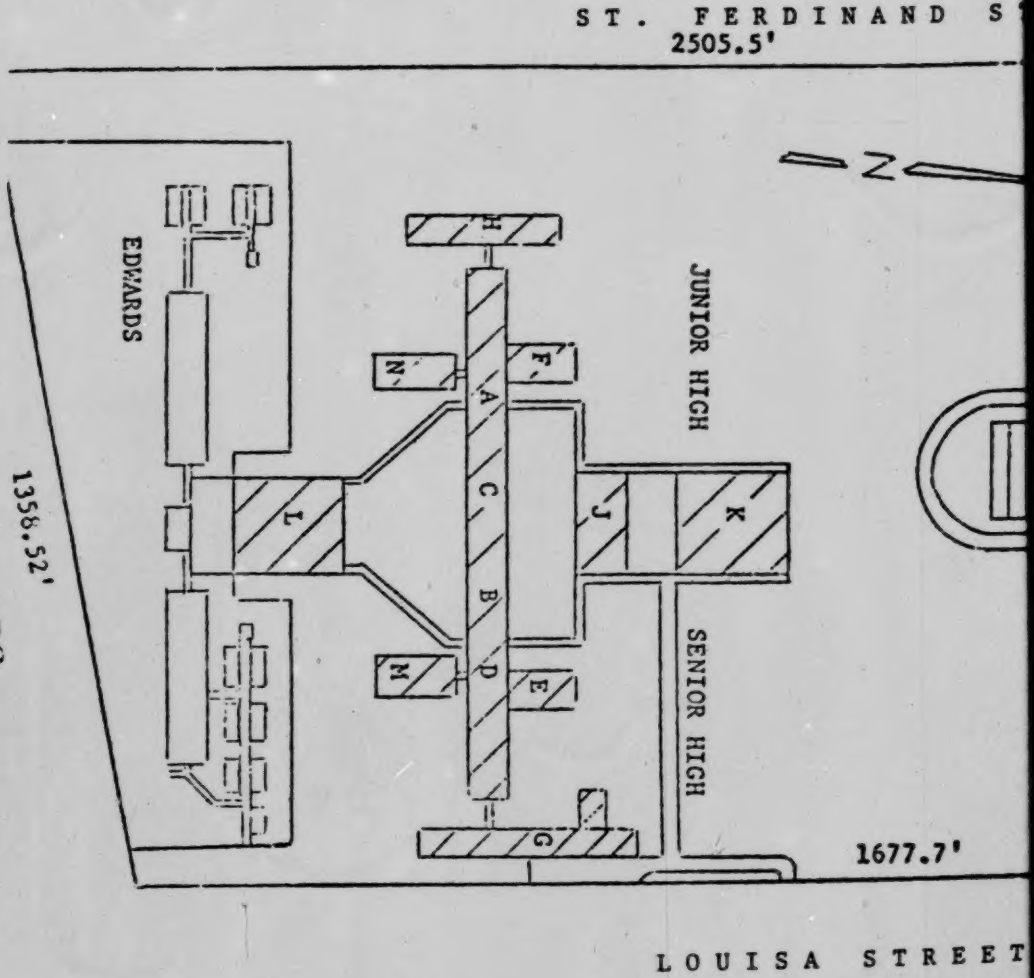

ST. FERDINAND STREET SIDE
2505.5'
N
EDWARDS
H
F
N
A
C
B
D
E
M
G
J
K
L
JUNIOR HIGH
SENIOR HIGH
958.16'
FUTURE ALMONASTER AVE. EXTENSION
L & N RAILROAD TRACKS
1076'
500.11'
CENTRAL SERVICES
534.11'
1677.7'
1125'
LOUISA STREET SIDE

EDWARDS:
7.03 Acres
306,156 Sq. Ft.

CARVER JR. & SR. HIGH
65.22 Acres
2,841,413 Sq. Ft.

FIGURE 1
PLOT PLAN
CARVER COMPLEX
AS OF SEPTEMBER 1, 1967

SCALE 1" = 300'


ST. FERDINAND S
2505.5'
N
JUNIOR HIGH
SENIOR HIGH
A
B
C
D
E
F
G
H
J
K
L
M
N
EDWARDS
1358.52'
1677.7'
LOUISA STREET

EDWARDS:
7.03 Acres
306,156 Sq. Ft.

FIGURE 1
PLOT PLAN
CARVER COMPLEX
AS OF SEPTEMBER 1,

SCALE 1" = 300'

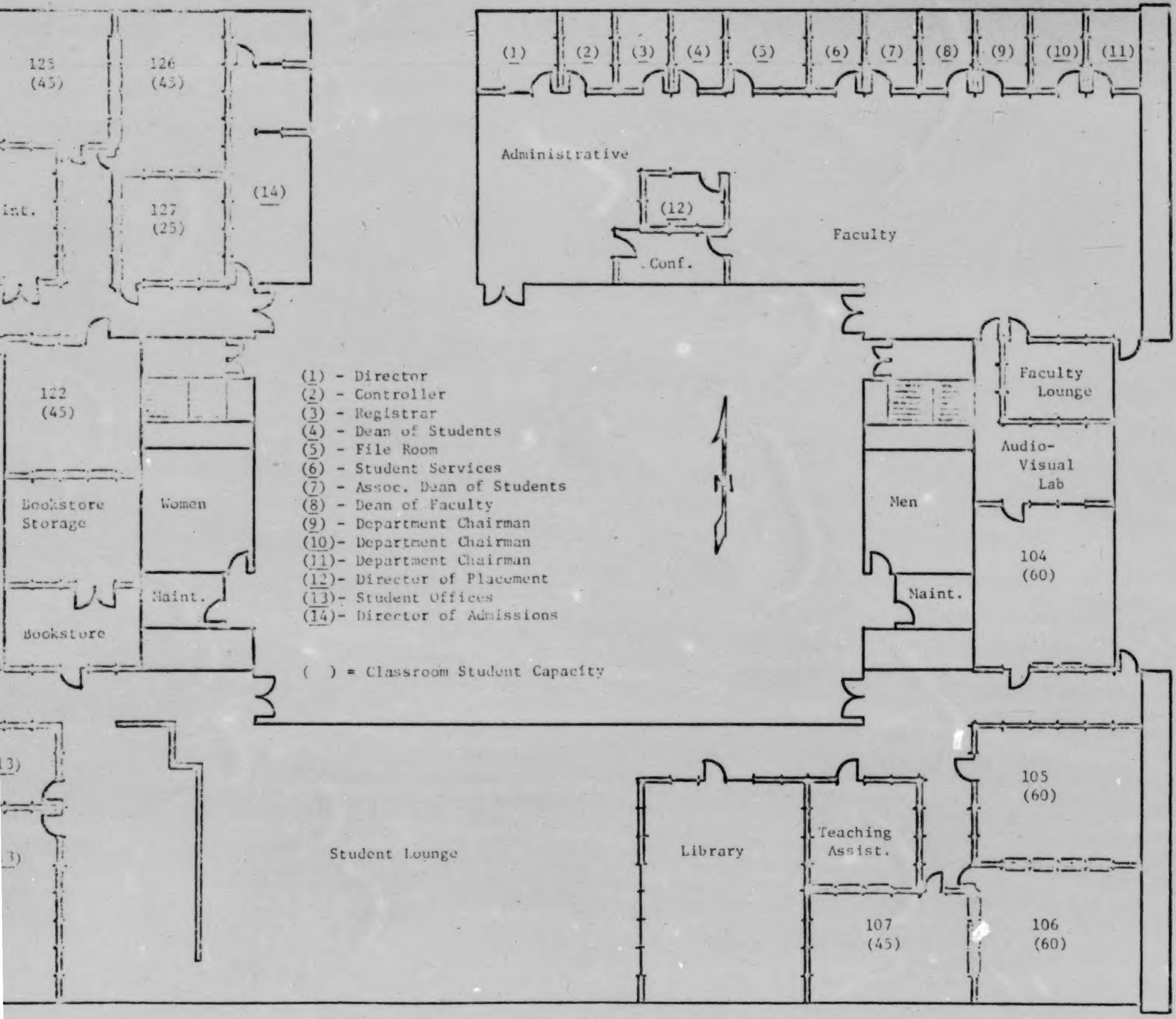

125
(45)
126
(45)
(14)
int.
127
(25)
(1)
(2)
(3)
(4)
(5)
(6)
(7)
(8)
(9)
(10)
(11)
Administrative
(12)
Conf.
Faculty
122
(45)
Bookstore Storage
Women
Maint.
Bookstore
(1) - Director
(2) - Controller
(3) - Registrar
(4) - Dean of Students
(5) - File Room
(6) - Student Services
(7) - Assoc. Dean of Students
(8) - Dean of Faculty
(9) - Department Chairman
(10)- Department Chairman
(11)- Department Chairman
(12)- Director of Placement
(13)- Student Offices
(14)- Director of Admissions
( ) = Classroom Student Capacity
Faculty Lounge
Audio-Visual Lab
Men
Maint.
104
(60)
13)
3)
Student Lounge
Library
Teaching Assist.
105
(60)
107
(45)
106
(60)

FIGURE 2
GROUND FLOOR

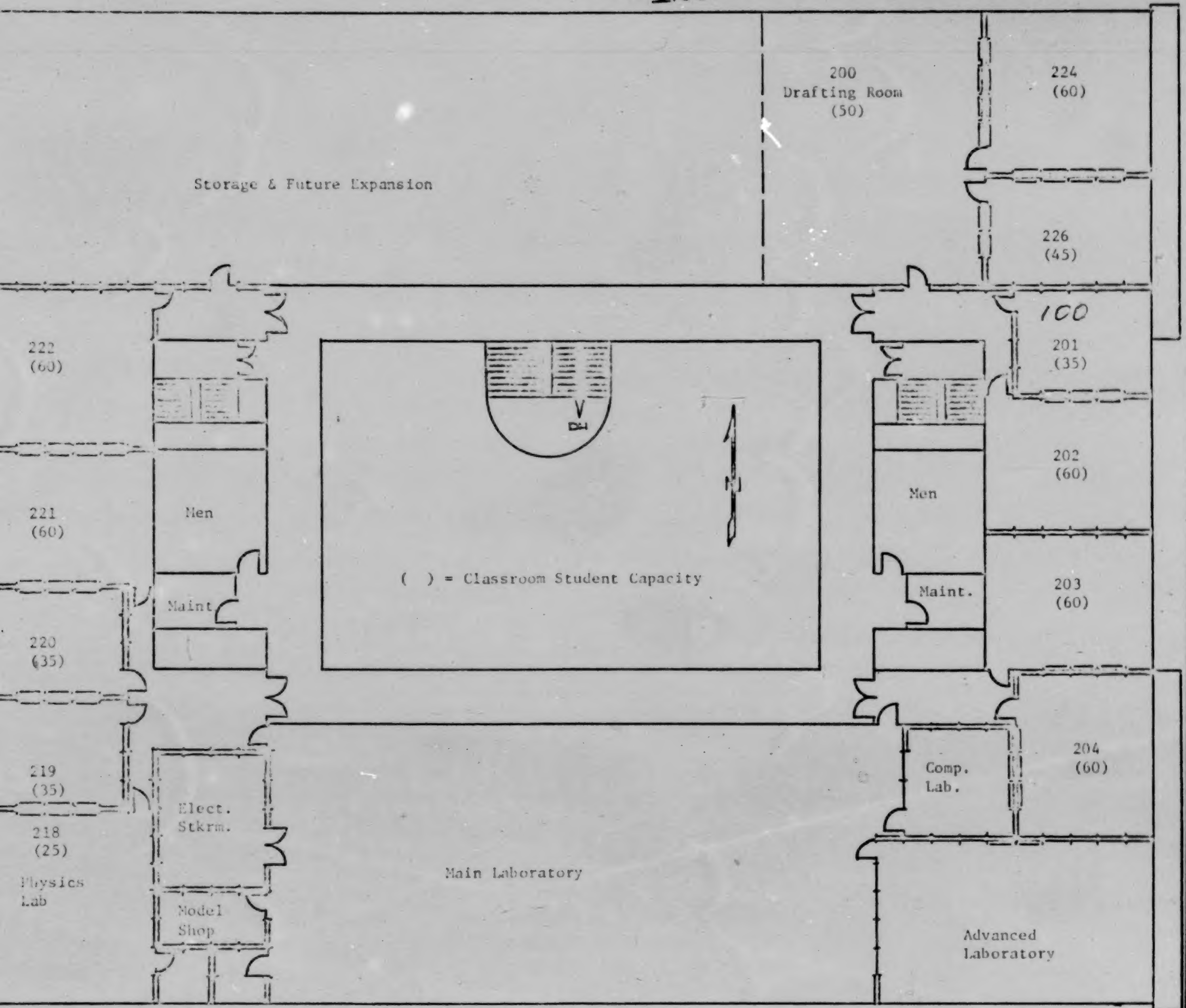

200
Drafting Room
(50)
224
(60)
226
(45)
Storage & Future Expansion
100
201
(35)
222
(60)
202
(60)
221
(60)
Men
Men
( ) = Classroom Student Capacity
Maint.
Maint
203
(60)
220
(35)
204
(60)
219
(35)
Comp.
Lab.
Elect.
Stkrm.
218
(25)
Main Laboratory
Physics
Lab
Model
Shop
Advanced
Laboratory

FIGURE 3
SECOND FLOOR

The three schools are working together. There are some students of middle school age taking some courses in the senior high schools, and there may be some students in senior high school who may be a little slow, taking say a math course or an English course at a middle school level.

Carver is in a very delicate political situation in that it is geographically located in a cul-de-sac where a canal intersects a railroad track at about a 30 degree angle. It is blocked in, along with the Desire Housing Project. Some parents in the community are very concerned that any additions to the school--any growth, any new developments, will all be conducive to ghettoizing their children. So really, that school's growth is at a standstill. This is disappointing to some school staff members whose only goal is to best work with and serve the community. The community itself has been in great turmoil. It appears that major rioting took place in the cul-de-sac between the more conservative Blacks and the proponents of the Black Panther movement. From what I could gather, there were actually deaths as a result of conflicts in the streets. There is a major shopping center within the cul-de-sac that was built to serve the entire housing project. This was just abandoned because of the riots, robberies, etc. There was grass growing in the parking lot. So the residents have to go outside the cul-de-sac for any shopping. There is nothing in the community itself.

The entire perimeter of the Carver complex is furnished with security guards, to keep outsiders from creating problems. Certain staff members, e.g. Assistant Principals, are actually security people who were demanded by parents to help relieve the tense situation that has been going on and to protect students on campus. There are also community members who voluntarily came in to help with security. I met some of these people and they are very conscientious. One is a minister on weekends, and in the evenings. During the days he's on campus as sort of a security guard and intermediary between the students and the school administration. These supplementary staff members are being salaried this year for the first time, although this type community liaison has been in effect for about three years, viz: since the community had all the trouble. The senior and middle school are, in effect one long corridor, and it gets larger in the middle. It is a three-story building (A,B,C,D, of Figure 1). Building L is a huge arch structure, a cafetorium--combination of cafeteria and auditorium. The cafetorium primarily serves the elementary school and the cafeterias in Building J the middle and senior high schools purely as cafeterias. Carver's scheduling for cafeteria use may be novel. Instead of having, say the 2000 students of each school on a multi-period scheduled basis for lunch, all are assigned the same lunch period and divided up in all three cafeterias on the complex. In this way all the students from the senior high school go to lunch at the same time; all the students from the middle school go at the same time. Specifically, there is one senior high school lunch period, one middle school lunch period, etc. This has improved class scheduling and has helped security tremendously. Incidentally, some 70% of the students attending this school are on the free food plan. This indicates the poverty level of this community.

Another thing Carver does is worth considering for SWEP staffing. Carver had a tremendous vandalism problem. They have overcome this by putting their limited custodial staff solely on a night shift basis. Now the custodial work is still performed and building security is achieved at the same time.

In Buildings A,B,C,D, classrooms come off a main corridor that may serve as one huge ventilating duct. The classrooms are separated from the corridor by panels. The center section of these panels are approximately four foot steel panelling. The bottom two feet are sliding wood panels. The top two feet are of sliding glass. They do not have air-conditioning in Carver, but by sliding these glass and wood panels back and forth the entire hallway ventilating effectively serves all rooms. From an engineering point of view this is a simple idea that is highly workable, at least according to the engineer's drawing. In practice, however, the wood panels were all nailed shut. This is because it was found that whenever a student was late and wanted to sneak into class, he/she just slid under the panel; if a student wanted to sneak out of class, he/she merely slid off the chair and out the panel opening. I believe the idea still has practicality and suggested a future use of grillwork in front of the wooden panels.

In front of each face of Building A,B,C,D, is a sunshade made of concrete tile. Each was emplaced as continuous panelling and ran the length of the building. It is a very beautiful design and permits light to enter while discouraging a student's looking out and being distracted by what is going on outside. However, the continuous structure had all sorts of problems due to expansion and contraction, so was breaking into small segments. It cost something like $180,000 to slice expansion joints into the tile panels so that individual tiles could be replaced without replacing the entire wall.

Building L is really beautiful from an engineering point of view. It is a large concrete arch structure. The concrete arches comprising it start at ground level and are about 75-80 feet in radius. A disadvantage, however, is that kids walk right up to the top of the arch, from ground level. Getting them down is a major problem. It would take costly, elaborate fencing to solve this problem.

Carver's perimeter fence system is proving quite impractical. Elementary school children from the Desire Housing Project need to go all the way down to the far end of the complex and turn around and come back a good distance inside the fence to reach their schoolrooms. If the school wants to put in another gate, some faction of the community complains because in their opinion it is abetting ghettoizing.

Carver's classrooms are conventional and in very good shape. They have new machinery for certain shop courses. Scheduling is on a partial cluster basis, where pupils can spend entire half days in certain career or vocational courses. The faculty appeared very enthusiastic. For example, there was a woodshop instructor who developed the teaching of plastics, also. He had really been motivating the students to a point where they were making an automobile body out of fiberglass. Several of the faculty members I saw would be classed as "hippies" in the Dallas system. For example, the woodshop instructor had a beard, and was wearing loafers and jeans. He wouldn't be permitted in a school building in Dallas the way he looked. But I think he was great. He was relating to the kids, and that would count most.

Carver is losing population because some cul-de-sac parents can't get away from the idea of their kids being ghettoized if they go to school in the commun They are actually trying to transfer their children to school outside the attendance zone and this is being permitted because Carver is so crowded. The community population grew very rapidly and Carver is presently over-crowded, but is expecting a population decrease.

Some cul-de-sac parents believe it's a loss of status to say that their kids go to Carver. It means their children are in the ghetto; that the parents did not have the motivation to send them outside the ghetto. The idea of going from elementary school through senior high school on one site does not sit well with such parents because they look on it as an intent to keep everybody right in the cul-de-sac ghetto.

It appears very difficult to communicate with such people in the community. They see themselves isolated by the canal and railroad. They are packed geographically into a corner. Then the school system comes along and installs an educational program that says--to their way of thinking--that no kids are going out of this area from elementary school onward.

New Orleans (viz: Orleans Parish) school teachers appear to be talking very strongly about unionizing. From what I could tell, their salaries aren't that much lower than Dallas'. Their starting teacher with a B.A. gets $6500, and a principal of one of their larger senior high schools would be getting $20,000. It appears that in the upper levels they have very few salary inequities compared with Dallas.

The equipment in Carver shops looked real good. Carver was very hard-hit by floods during a hurricane several years ago. Ground floors of buildings were actually underwater to a depth of about 5½-6 feet, and all the equipment was ruined. New Orleans was declared a disaster area. The federal government gave them funding dollars for new equipment and building restoration.

3. Nova School

Nova is considered an educational research and development center for Broward County. The Nova complex is housed in many buildings with one main cluster of buildings being connected by a large roofed-over area in the center.

Nova designers went very modular for internal construction. Although the design is modular, the staff still encounters problems because when they want to move a wall, they've got to write paperwork, send it to the downtown office, the engineering staff, and elsewhere through the chain of command.

It appears meaningless to consider modular construction where you aren't going to have the staff right on campus making "modular" mean something.

The many separate buildings has created special problems in that at end of periods all the buildings are suddenly wide-open so that when all the students pour out of rooms so does the cooled air in summer and the heated air in winter. It takes about 45 minutes to charge rooms to a desired temperature, so the entire process is possibly inefficient.

The many separated buildings and entrances are also bad from a security point of view. There are just so many doors and so many buildings the staff has difficulty keeping track with what is going on.

The several separated buildings could also provide some morale problems with the faculty. For example, a majority of rooms in a building could be used for teaching math. The teachers then tend to think of this as the "Math Building". Then one semester a math course is dropped and teaching of history is scheduled for the room involved. The other teachers resent this. "What do you mean interfering with our Math Building?"

Plaster walls are most common throughout the building. Many schools with heavy traffic now find tile walls more attractive and maintenance free. Some of the staff saw an effective use of semi-glazed tile walls in the Paul L. Dunbar school complex in Baltimore, Maryland.

Folding doors were used as dividers in some of the larger classrooms. Apparently, they are proving impractical. The concensus seems to prefer either an "open room" plan or smaller rooms separated by acoustic panels.

As far as laboratories are concerned, a recommendation is that instead of permanently installing a few long physics or chemistry tables, that there be many smaller portable tables, each serving 3 or 4 students. These could be on wheels and their frames could include receptacles for connecting to terminals for providing gas, electricity, air and water. An opinion is that where you have the classical "long workbench" in any shop or lab, you don't have modular construction.

Nova includes several large lecture halls. The concept of a large lecture hall has been found by the Nova staff to oppose the idea of individualized instruction. So, these lecture halls are no longer in use.

I received an impression from Dr. Gores that Nova was a private school. This is not the case. Like Skyline, they do have students from all Broward County. Some travel two hours each way, by bus.

### 4. De Vry Institute

This single building facility was reported to have been completed in 90 days and have steel plate curtain walls. Its construction went up in seven months and it is basically a reinforced concrete structure.

This was the first of the new family of De Vry Institute buildings that are going up around the country. In Columbus, Ohio, with more severe weather problems than Phoenix, a sister structure was completed in six months, and the next, in Kansas City, Missouri, in five months, so it looks like an intended performance is being achieved where a design like this can go up in something like three or four months.

The construction is really conventional. I couldn't see anything that really lent itself to going up that fast. The contractor, Kitchell, of Phoenix, erected the steel frames, cast concrete around them, then finished the structure.

The building has standard type floor plans on each of its two stories. Centered, is an open courtyard. The novel thing is that the room design is highly modular. The ceiling has grooves, or tracks, every five feet in the long (corridor) direction. A room is set up by putting any length panels in these. Thus, room size is, within five foot increments, limited only by the length of the building, and width is limited only by what need be reserved for a corridor. The air-conditioning ducts service through the ceiling. There are no ducts, wiring or plumbing in any interior walls. Instead, stanchions are provided that plug into pickoffs (at groove intersections) in the ceiling. Then, service to, e.g. a workbench can be provided from a stanchion that is rarely more than five feet away.

De Vry is, at times, changing their program or room use almost every six weeks, so they are changing their walls every six weeks to keep up with the program. They teach subjects like television electronics, and industrial electric and have no surplus room. Therefore, they will have one lab set up as basic electronics, and when they finish the basic instruction, they will modify the space over a weekend, and in the next six weeks teach more advanced electronics on the generally same floor space.

# APPENDIX 3.4

# MISCELLANEOUS FACILITY FACTORS REVIEWED DURING VISIT WITH EDUCATIONAL FACILITIES LABORATORIES

During the morning of September 21, 1973, Allen M. Feder visited in the offices of Educational Facilities Laboratories (EFL), 477 Madison Avenue, New York City with Dr. Harold Gores, President, EFL and Mr. Larry Molloy, Architect, EFL. Feder began discussions by elaborating on SWEP materials sent earlier to Dr. Gores to facilitate the meeting. The subsequent discussions covered a period of 3 1/2 to 4 hours.

Dr. Gores, a former teacher in and superintendent of a suburban Boston, Massachusetts school district, as well as being an engineer, is a fascinating conversationalist possessing outstanding knowledge of educational facilities. Under these circumstances, Feder felt pleasurably overwhelmed by the flow of information from Dr. Gores.

Larry Molloy is a young architect currently completing a manuscript on concepts for "schools" of the future.

Information covered in the meeting appear below. There is no significance to the order of the topics, or the detail given, nor are specific speakers identified.

1. "Schools" of the Future

The trend (in West Europe and some places in the United States) is away from the word and connotation "school", to "community center", including all this implies. Specifically, basic education costs are escalating at the rate of 12% per pupil per year. Peter Drucker (a social economist and behavioral scientist) projects that by 1990, half the U. S. economy will (have to) be devoted to education. Because of such financial pressures alone, buildings prepared exclusively for educational purposes will be an extravagance not likely to be supported by many communities. Unless training/education is to be provided "round-the-clock", evenings and weekends, there is no justification for not permitting a "school", paid for by the community, to serve other purposes of the community. At minimum, such other purposes could include the functions of public meetings, religious services, recreation, performing arts, and havens during times of natural disaster. At maximum the community could seek to amortize some of its investment in the facilities by "renting" space for business (e.g. night use of office space, phone service) and entertainment (e.g. auditorium for showing movies, gymnasium for professional events).

Much of the foregoing, viz: the transition from "schools" to community centers", is the subject of Larry Molloy's forthcoming book.

2. The Furniture of the Community Center

The community center(s) will be the public facility wherein it will be most convenient for a person to learn to change. In order to achieve or effect a behavioral change it is not mandatory that a person be "seated at a desk that is bolted to the floor".* James Joyce wrote his "Ulyses" while standing and/or moving around. Winston Churchill wrote his speeches in much the same way. In early America, school rooms included "tois", ledges around the room for supporting the books and writing materials of students who would "learn" while standing. In most oriental countries, students learn while seated on rugs on the floor.

In essence, the present requirement for desks/tables/chairs as part of the classroom scene is archaic and without scientific foundation. Where rigid furniture concepts do not govern classroom design, it will be more feasible to think of schools serving also as community centers. Perhaps more important, the classical desk/table/chair furniture of classrooms represent a school facility cost element that may be second to only that of the structure itself. Therefore, substitution of "tois", scatter rugs, styrofoam blocks, bean bag chairs for the classical furniture could represent a considerable economy, and may actually facilitate the learning process.

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* see note by A. Feder, p. 6, this Appendix

### 3. Franchising

Franchised food services are proving more economical in some New York districts than "in house" food services. This could be extended to franchised custodial and other school support services.

Experiments suggest open eating areas where "kids" can move around and socialize while eating items they prefer, like sandwiches, hot dogs and pizza, can provide better nourishment and better student control.

### 4. School Size

The trend is away from "super", to "mini" schools. One reason is that communities experiencing social conflict have found that the greater the number of students congregating at one site, the greater will be the likelihood of confrontations occurring.

### 5. Windowless Structures

Windowless school structures have been tried to minimize vandalism costs and reduce construction and maintenance costs. The latter two type savings are generally reduced by the requirement for and operational cost of artificial lighting. The biggest problem of windowless structures has been, however, the ease with which students can (and will) throw or short switches to plunge entire building wings into darkness and create panic.

### 6. General Nature of (Roof) Structures

A mix of hard and soft structure will maximize capital outlay. Typical of contemporary and near future soft materials is sheeting made of fiberglass in a Teflon matrix. The material is fireproof and translucent. If laid in a double layer with air space between, it could provide good insulation.

Even in single layers, though, it could be used for, e.g. roofing over gymnasiums, field houses, and similar school components where good illumination is an asset, and inside temperature control need be held only within a few degrees.

The Charles Wright Academy, Takoma, Washington has components of such modern, soft materials resulting in handsome and effective building space at a cost of $12.00/sq. ft.

7. Construction/Response Time

Of late, much major construction in the U.S. has become obsolete between the time of ground breaking and initial occupancy. This obsolescence has had demographic origins in many U.S. communities. Skyline Center's wood shop(s) represent technical obsolescence, the wood industries they were intended to serve having "moved out" of the Dallas area in the period between ground breaking, '67-'68, and occupancy, '71.

Following planning and construction start-up, the most effective solution to the above types of obsolescence is to have a "quick response" in building construction. Such response can preclude being surprised by "long range" demographic changes, and could eliminate a need for making "long range" prognostications.

Several new forms of construction could permit major building occupancy within 9 months of start up (see Section 8.1, below). Consequently, the planning and new construction will serve the key moment in time, less 9 months.

8. Sites to Visit

The SWEP staff should visit sites with the intent of learning "what not to do" rather than emulating anything in existance today.

### 8.1 De Vry Institute, Phoenix, Arizona

This is the most recent of several commercial schools contracted for by Bell & Howell to modernize their operations, yet overcome escalating construction costs. The total new building program is considered very successful, each of the highly serviceable, ultramodern buildings prepared to date being completed within 9 months of start up. The major unique structural components of the buildings are curtain plates of stainless steel cladding on steel.

The Phoenix structure is 2 stories high and rests on a poured concrete slab.

### 8.2 Paul L. Dunbar Community Education Park, Baltimore, Maryland

This complex is an example of (a) what can be done by reconditioning older structures, and (b) the trend toward community center emphasis (see Section 1). The complex includes shops, commercial services, park areas, as well as traditional school elements e.g. a vocational school.

The complex draws its students from the entire school district. It is considered one successful answer to minorities demands for participation in community and community education activities.

### 8.3 George Washington Carver Complex, New Orleans, Louisiana

This complex was started as an ideal education park. Demographic and other changes made it obsolete and almost useless between startup and occupancy. It merits visiting only for its building layout--as example of "what not to do".

### 8.4 Nova School, Ft. Lauderdale, Florida

Nova is an example of 1960 era construction, so in a sense is obsolete. However, certain facilities (e.g. sattelited libraries) and programs (e.g. contracted education) merit attention.

Nova's architect was a Mr. Megason, now believed deceased. At last information, Nova's principal was Peter Wolf.

Note:

An interesting quote supporting this point appears with respect to deaf education in:

Mindel, Eugene D. and Grinker, Roy R., Sr., "They Grow in Silence", National Association of the Deaf, Silver Spring, Maryland, 1971

and is as follows:

"...deaf education represents a microcosm of our general educational and political system. Most of us were also cramped into a classroom niche in a desk and chair bolted to the floor. This unnatural cage that we all so early allowed ourselves to be thrust into symbolized the natural limits imposed on our mind's pursuits. To get up and explore the surroundings or spontaneously communicate with one's neighbor was regarded as a threat to the prevailing order. In such stuffy classrooms, seeds of ideas dry up for want of fertile fields. A little sun gets through here and there, but mostly we are trained to become trivia's yeomen."

## APPENDIX 3.5

# FUEL SUPPLY, POLLUTION CONTROL CONSIDERATIONS FOR AN INTEGRAL PROJECT SITE

BY

ALLEN M. FEDER

PROJECT FACILITIES ENGINEER

AUGUST 27, 1973

It is likely that an integral (single campus) education park of the next 10-20 years could require a relatively large fossil fuel supply for heating, shops and many other facilities. It is also likely that the cost and availability of fossil fuel could be a critical factor at the time an integral facility is implemented and operated. Finally, the conversion of fossil fuels to energy is characteristically accompanied by generation of "pollutants" whose control need be a major concern of facility design.

## 1. Background

During the recent two weeks, A. Feder conferred with representatives of area utility companies, 4-5 local building contractors, and a heating/ventilation/air conditioning (HVAC) specialist (e.g. see Contact Reports for week of August 20, 1973). There was generally good agreement that fuel conservation with coincident pollution control will be achieved in near future major structures/complexes by means of "heat pipe" type devices. (Pollution control will result by e.g. the lowering of exhaust temperatures to a point where particles are more easily removed from the air stream. The elimination of thermal pollution is essentially inherent in heat pipe designs).

## 2. Heat Pipes

The principles of heat pipes have been known for centuries. Attachments 1 and 2 are here provided to describe their operation and performance. In the last decade heat pipe research was concentrated on the development of housing, wick and working fluid combinations for achieving desired performances. Units are now becoming operational.

## 3. Advantages

A well designed heat pipe system can reduce input "energy" requirements by as much as 78% (see attachment 1). This can correspond then, to a reduction in fuel required for, and pollutants exhausted by a power system.

While a heat pipe system could have a moderate to high initial cost, its use will reduce the size of power plant (e.g. HVAC) required for the facility. Thus, total capital outlay could remain the same. However, major savings are promised in fuel costs, pollution control, and building structural costs. The latter result from the relatively lightweight and smaller size of an HVAC/heat pipe system compared with a conventional HVAC system.

Finally, a heat pipe has no moving parts, requires no power, and is virtually maintenance free.

## 4. Conclusion

Fuel consumption and pollution generation are not presently expected to be significant project planning factors. For the time period of interest devices such as heat pipes will be seeing general use for fuel conservation and pollution control.

ATTACHMENT I : "Heat Recovery -- How Can the Heat Pipe Help?" by Donald P. Deyoe, ASHRAE Journal, April 1973, was removed from this document prior to its being submitted to the ERIC Document Reproduction Service.

# APPENDIX 3.6

# A PRELIMINARY MODEL FOR DETERMINING SWEP UTILITY REQUIREMENTS

1. The Need

SWEP utilities could include fossil fuels, electricity, water and sewerage services. The cost for these services will be a planning and operations budget (forecasting) factor. The availability of these services could be a site location factor. While preliminary investigations suggest the latter will not be true on a gross basis[1,2,3] it could be true on a local basis. (For example, relief features within a promising SWEP site could determine the requirement for pumps to maintain sufficient water pressure). A need exists, therefore, for forecasting utility service requirements for SWEP.

2. The Problem

Utility requirements will be determined by factors that are unknown at this writing. These factors include the SWEP (student and staff) population (relative to both a main campus complex[4] and integrated components configuration possibilities), SWEP's mission(s), its gross location and its architectural features.

Another aspect of the problem is that utilities of the year 2000 could have a different aspect than at the time of this writing. For example, a portion of electrical service as is presently purchased "from outside", may be generated within SWEP by, e.g. a nuclear power unit, or solar power cells. Fossil fuels as are presently consumed for heating/ventilating/air conditioning (HVAC) could be obviated by use of electrical heater wall paneling and thermoelectric coolers, or their volume use could be drastically reduced by the use of devices such as heat pipes[5] and innovations in insulation. Finally, the nature of water/sewerage utilization could be drastically altered by use of an on-site recycling plant.

## 3. Approach

It is possible to satisfy the aforementioned need, in at least a preliminary manner, by use of known data, coupled with assumptions of an accepted credibility.

### 3.1 Known Data

Skyline Center has features that could be representative of an education park-type complex. It is the only such complex in the SWEP-served region.

Therefore, it could be considered representative of requirements for e.g. fossil fuel/electrical consumption relative to HVAC. (As data are obtained from Nova and George Washington Carver complexes [6] it will be interesting to compare them with Skyline data). Skyline's utility consumption for its first school calendar year of full operation, 1972-73, was as follows:

a. Electricity: 11,981,114 kwh* (all 1972)
b. Water: 52,266,000 gals. (all 1972)
c. Natural gas 208,902,000,000 cu. ft. (5/72-4/73)
d. Fuel oil 93,007 gals. (12/72-4/73)

During 1972 the Skyline population on site at any one scheduled instructional period was approximately as follows:

a. students: 4,000
b. staff 400
c. total 4,400

A second known is that the volume of water intake to a facility is reasonably representative of the sewerage outflow required. Therefore, estimates that follow for water utilities will also serve for sewerage data without additional specific reference.

A third known is that natural gas and fuel oil have their value in that they provide energy when combusted, e.g. for HVAC purposes. This value can be stated in the industry accepted form of British Thermal Units (B.T.U.s). Therefore, the energy consumption of Skyline in 1972-73 was:

a. Natural gas:

$\underline{208,902 \times 10^6}$ cu. ft. x $\underline{1,000 \text{ BTU/cu. ft.}}$ * = $208,902 \times 10^9$ BTUs

b. Fuel oil:

$\underline{93,007}$ gallons x $\underline{18,230 \text{ BTU/cu. ft.}}$ * = $1.7\text{x}10^9$ BTUs

c. Total consumption = $208,903.7\text{x}10^9$ BTUs

3.2 Assumptions

Many authorities forecast the consumption of energy will increase within a range of 10 to 20 x by the year 2000. Some aspects of this increase are likely to be of concern in the home (e.g. new appliances), but of little significance to SWEP. However, because SWEP could include many "power hungry" features such as mass people movers, a multiple terminal computer network, and laser intercommunication[4] that are in addition to current Skyline-type features, the lower limit of the forecast increase, 10 x, is assumed logical.

A second assumption in support of using this value for electrical considerations is that devices such as heat pipes[5] will make the use of energy more efficient.

A third assumption is that the use rate of fossil fuels by SWEP will remain the same as that for Skyline Center, based on its partial replacement by electricity, and the assumption 1, and assumption 2 data immediately above.

*Conversion factor

A fourth assumption is that while there will be an increased demand for water, recycling to reduce water costs and pollution will be standard practice for large facilities. Therefore, SWEP water consumption is assumed to be at a rate of only 1½ x that for Skyline.

## 4. The Preliminary Model

The model given here is merely a factor obtained by dividing the utility service use of Skyline Center (SC) in 1972-73 by the Center's population of that year. This will provide a rate of utility service used per person (USP) in Skyline Center. The USP multiplied by forecast use increases (see Section 3.2) then provides an estimate for SWEP's USP. Obviously, the availability of new data as SWEP activities progress, will provide means for enhancing the USP data given below.

### 4.1 SWEP's Electrical USP Model

$$\frac{11{,}981{,}184 \text{ kwh}}{4{,}400} \text{ (SC)} \times 10 = 27.229 \text{ kwh} \quad \text{SWEP electrical USP}$$

### 4.2 SWEP's BTU USP Model

$$\frac{208{,}903.7 \times 10^{9}}{4{,}400} \text{ BTU's (SC)} \times 1 = 474{,}781 \times 10^{6} \text{ SWEP BTU's}$$

### 4.3 SWEP's water/sewerage USP Model

$$\frac{52{,}266{,}000}{4{,}400} \text{ gals (SC)} \times 1.5 = 7{,}919.09 \quad \text{gals SWEP water/sewerage USP}$$

### 4.4 Year Round Use Factor

In 1972-73 Skyline Center did operate into evening hours, as could SWEP, and never totally "shut down" during summer months and holiday periods. However, it certainly curtailed activities during these times to an extent that reflected in utility useage.

Many "authorities" forecast future school operations being performed on a "year round" basis. Where this will be the case with SWEP it will be necessary to consider the increased utility useage that will result. For this purpose it could be expedient to increase each SWEP USP value modeled above by an arbitrary 10%. This could compensate for Skyline Center's 1972-73 periods of curtailed activities.

The only utility service for which such increase may not be necessary is sewerage. Sewerage capacity will likely be a fixed value, because it will most closely relate to SWEP's maximum forecast daily population, regardless of the time of year in which this maximum could occur.

### 5. References

Feder, Allen M.; Contact Reports, 8-20-73, "Limitation on Siting an Integral Educational Park Complex relative to:

1. "Natural Gas Service".
2. "Electric Service".
3. "Water/Sewer Service".
4. Feder, Allen M., Appendix 3, "A Preliminary SWEP Facility Configuration Relative to Contemporary Concepts of Future Education", 8-28-73.
5. Feder, Allen M., Appendix 2, "Fuel Supply Pollution Control Considerations for an Integral Project Site", 8-27-73.
6. Feder, Allen M., Contact Report, 9-6-73, "Facility Trends Re: Future Education".

## APPENDIX 3.7

# SOME CONTRACTORS' VIEWS ON SWEP FACILITIES PLANNING

## 1. Background

During the past two-three weeks Allen Feder met with members of certain Metroplex contracting firms at various times and places ("Let's meet downtown for lunch"; "Come on to my office at 5:30".) Most of the meetings were scheduled for Feder by staff members of H & A Corporation, 1619 Fuller Street, Dallas, Texas. (H & A is a "holding company" that includes Ranch Homes, Inc.; Shir-Lee Built Homes, Inc.; Urban Builders Supply Corp.; H & A Contractors Mechanical Services, and the Dallas area RCA-Whirlpool agency). Initially, the data flow was very free. Later, it is believed that someone suggested that any contractor contributing to SWEP planning could be jeopardizing his chances to bid any construction that would actually take place. Feder asked H & A to pass along assurances that no company would be identified in any reporting with the exception of H & A. (This company is not interested in prime contracting heavy construction or renovation.) This action by Feder was intended more to allay any fears than to maintain a flow of information. Specifically, a distinct pattern had already appeared by this time.

## 2. Early Discussions

Initially, the various contractors exchanged and offered a variety of ideas concerning SWEP engineering possibilities. These included trends in materials, trends in engineering practices, trade-offs in cost/and advantages of new construction vs. renovation. Relative to the latter, reference was made to: Miller, James N., "Bonanza in Old Buildings", Reader's Digest, October, 1973. Later review of this article proved it to be a "popularized" version of the excellent: Educational Facilities Laboratories, Inc., "Places and Things for Experimental Schools", EFL, 477 Madison Avenue, N. Y. C., N. Y. 10022, June, 1972.

3. The Pattern

As the conference progressed, there appeared independent concurrence of contractors to the effect that SWEP facilities planning could be meaningless prior to the soliciting of bids for facilities. Specifically, they indicated that nearly all facility factors will vary with the bidding contractors' circumstances. Thus, at the same instant in time, one contractor will be able to meet all specifications at lower cost via new construction than could another by renovation, or vice versa. Another might be able to bid a huge complex on land he could provide at lower cost than another could bid a small complex on land someone else provided.

Influencing contractors' bids will be such factors as:

a. Will they be already operating in the area where SWEP is to be prepared?
b. Will they be able to use a SWEP construction program for leverage in other business acquisition?
c. Could a SWEP construction program provide a tax advantage?
d. Could a SWEP construction program provide manpower, land, materials, and/or equipment acquisition and/or utilization that would make other projects more profitable?

4. Possible Recommendation

With consideration for the foregoing it is possible to recommend that requests for bids for SWEP facilities preparation include flexibility permitting bidding contractors to specify their solution for satisfying program, student population and other project specifications.

## APPENDIX 3.8

April 4, 1974 ARMY TECHNICAL SERVICE SCHOOLS LETTER

ARMY TECHNICAL SERVICE SCHOOLS
Job No. 2054.00

Mr. Will Lowrance, Coordinator
Student Activities and Communications
Skyline Center
777 Forney Road
Dallas, Texas 75227

Dear Mr. Lowrance:

The tour of Skyline Center you arranged for Mr. Anderson, myself, and Mr. Johnson of Office of Chief Engineer, U. S. Army, was very informative. We appreciate the time and effort extended by you and your staff. The investigation of your facility was beneficial in our development of criteria for the programming, design and operation of U. S. Army Technical Service Schools. Your arrangement for our visit with Dr. Feder was equally worthwhile. His studies of future directions and performance basis for facility study was particularly appropriate to our effort.

The results of our survey as finally promulgated in a Department of Army Manual for Service Schools which will be completed by September, 1974. As indicated at our visit, we will forward a copy for your information.

Sincerely,

David Vadman

jl

cc: Mr. Frank Guzick
Dr. Allen Feder ✓
Mr. William Johnson

# APPENDIX 4

## SITE CONSIDERATIONS

### LOVE FIELD AND REDBIRD AIRPORT

During the afternoon of August 15. 1973, Allen M. Feder, Project Facilities Engineer met with M. Howard Megredy, Director of Aviation, City of Dallas; and Gary W. Green and L. B. Tapp, Assistant Directors of Aviation, City of Dallas. Feder first described the Skyline Center program, then the immediate program in order to provide a background for the visit. The City officials were most cooperative, providing the attached plans (Love Field, figure 1; Redbird Airport, figure 2), pertinent information and a facility tour.

Feder's inquiries focused on the availability of ground space, structures and utility service at both the Love Field and Redbird sites, for either an integral educational park complex or for clusters of a "scattered campus" that could be best operated in conjunction with extant airfield-type facilities (e.g. aeronautics, avionics/electronics)

1. Summary - Redbird Airport

The Redbird site is characterized by a tremendous amount of available space. Utility service is forecast to be adequate for reasonable needs. Ground space rental can be predicted at approximately $0.10/sq. ft./yr. No structures presently exist that can be considered for the project purposes.

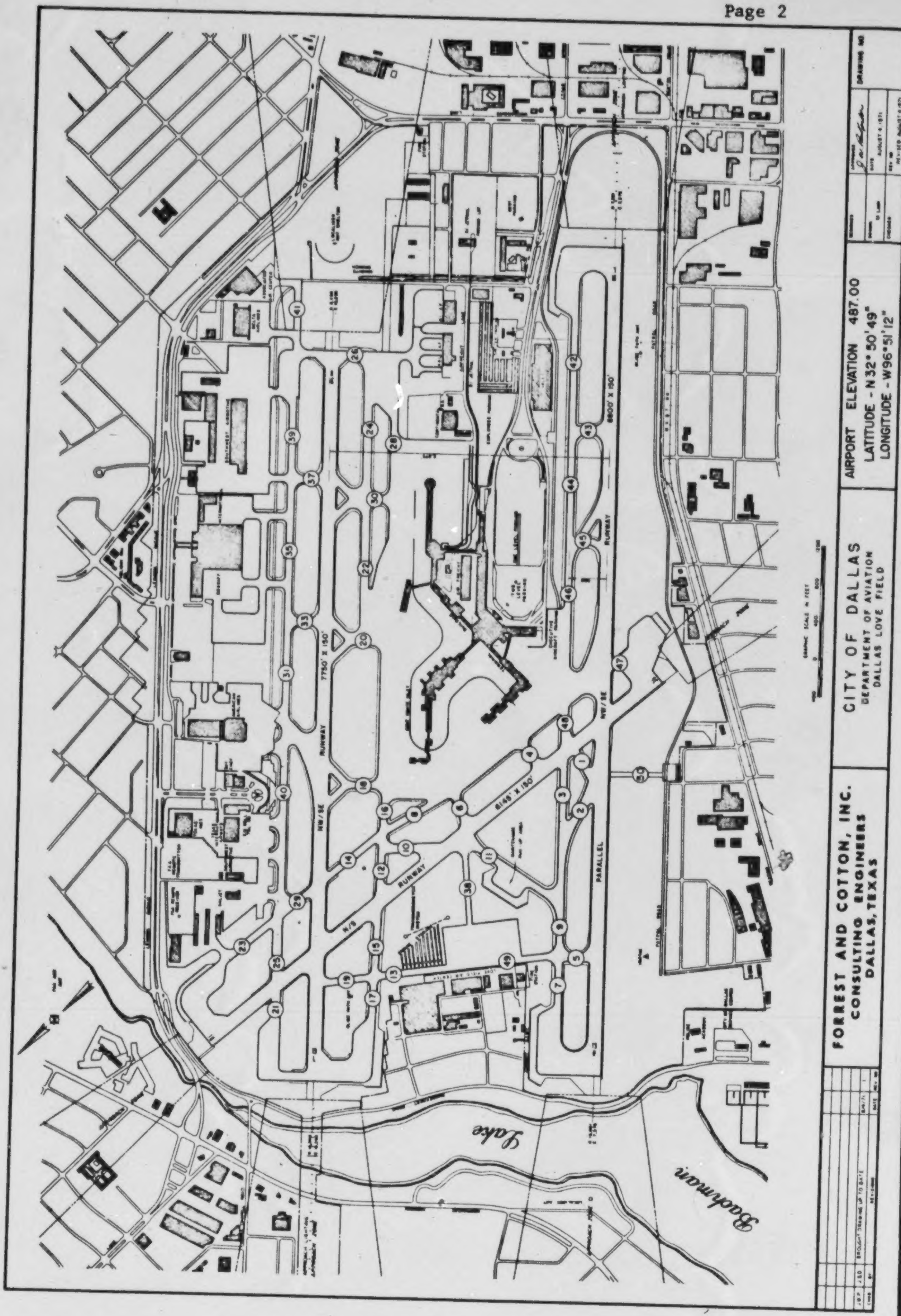
Mountain View College of the Dallas County Community college system is presently planning to offer aeronautics instruction. Relative to this, they are considering construction of a classroom building on Ledbetter Drive off the N end of the N-S runway (figure 2). It is believed they will rent (space in) a hangar that will be available only for near future action.

2. Summary - Love Field

Love Field has little if any space for new construction. Similarly, only few of its structures will become available when the scheduled airlines move to the Dallas-Fort Worth Regional Airport (DFWRA). However, the structures that will become available could merit project consideration. Also, a surplus of utility service and parking space for up to 9,000 cars will result from the move.

3. Love Field Structures

Love Field structures are generally "owned" by the occupying


RUNWAY 7750' X 150'
NW/SE
RUNWAY 8800' X 150'
NW/SE
N/S RUNWAY 6145' X 150'
PARALLEL
Bachman Lake
GRAPHIC SCALE IN FEET
400 0 400 800 1200
FORREST AND COTTON, INC.
CONSULTING ENGINEERS
DALLAS, TEXAS
CITY OF DALLAS
DEPARTMENT OF AVIATION
DALLAS LOVE FIELD
AIRPORT ELEVATION 487.00
LATITUDE - N32° 50'49"
LONGITUDE - W96°51'12"
DRAWING NO
AUGUST 4, 1971
REVISED AUGUST 4, 1971

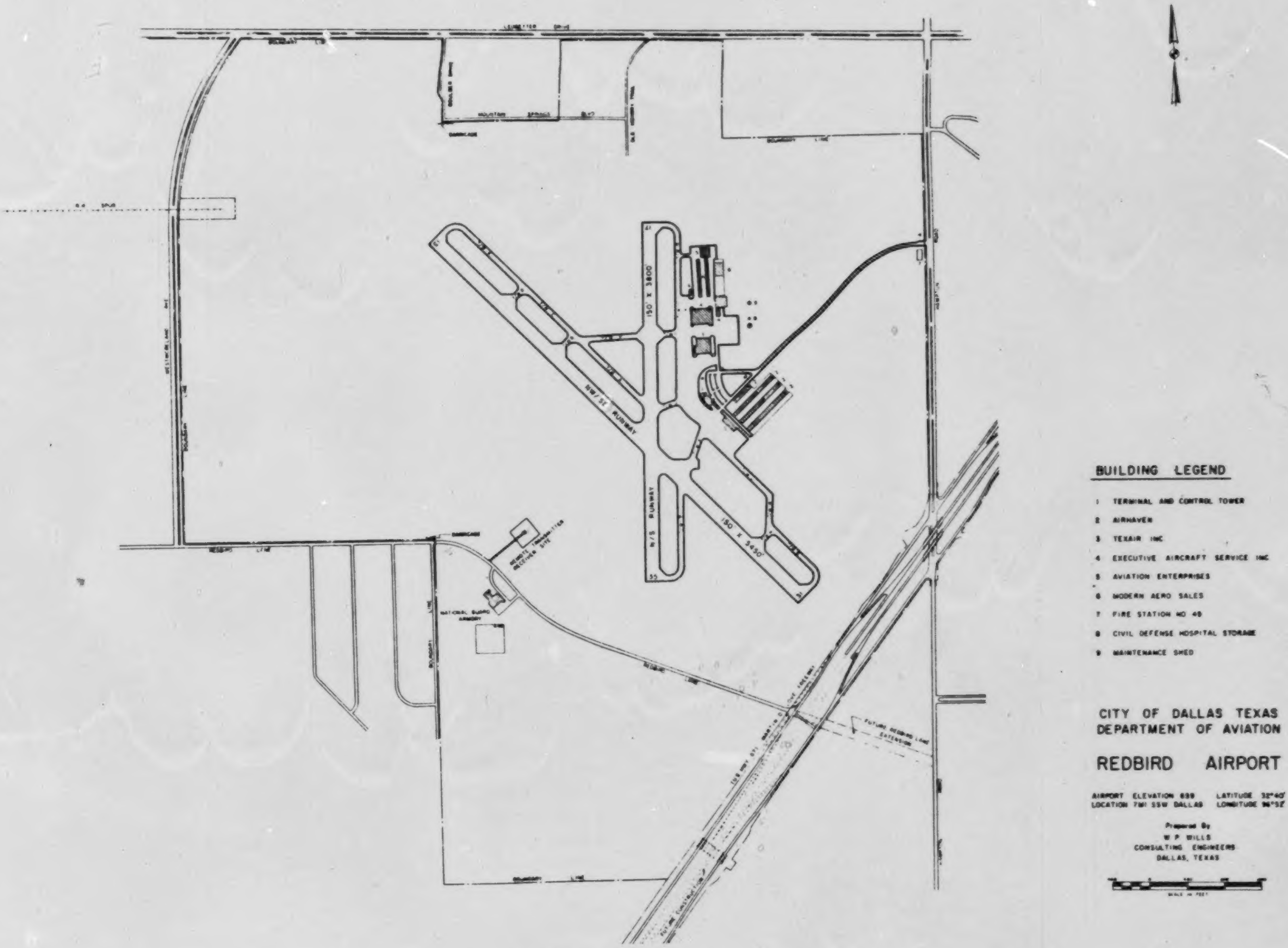

BUILDING LEGEND
1 TERMINAL AND CONTROL TOWER
2 AIRHAVEN
3 TEXAIR INC
4 EXECUTIVE AIRCRAFT SERVICE INC
5 AVIATION ENTERPRISES
6 MODERN AERO SALES
7 FIRE STATION NO 49
8 CIVIL DEFENSE HOSPITAL STORAGE
9 MAINTENANCE SHED
CITY OF DALLAS TEXAS
DEPARTMENT OF AVIATION
REDBIRD AIRPORT
AIRPORT ELEVATION 659
LOCATION 7MI SSW DALLAS
LATITUDE 32°40'
LONGITUDE 96°52'
Prepared By
W P WILLS
CONSULTING ENGINEERS
DALLAS, TEXAS
SCALE IN FEET
150' X 3600'
N/S RUNWAY
NW/SE RUNWAY
150' X 3450'
REDBIRD LANE
NATIONAL GUARD ARMORY
REDBIRD TRANSMITTER RECEIVER SITE
BARRICADE
BOUNDARY LINE
FUTURE REDBIRD LANE EXTENSION
FUTURE CONSTRUCTION

Figure 2

parties who pay land rents of $0.10/sq. ft./yr. to the City. The land rents are based purely on the ground space occupied, not the floor space of the structure(s).

The long range availability of Love Field structures is not likely, because the lack of occupancy will represent a loss to the owners. Therefore, the owners are attempting to get rental/sales committals now, for occupancy beginning 3-6 months from now. Committments are already held for essentially all hangars and service buildings by non-scheduled airlines, industry/private aircraft operators, and support services (e.g. air freight, maintanance, schools) of scheduled airlines that will operate out of DFWRA. Exceptions to this are many upper level Delta concourse (terminal building, figure 1) offices, some Braniff terminal building offices, the Valet parking structure, and the Sky Chef building

### 3.1. Terminal Building Offices

The smaller of these offices are directly applicable as administrative offices (e.g. teachers' offices, infirmary, conference rooms) for educational park purposes. The larger are directly applicable as classrooms. Indeed, many are prepared for this purpose, including built-in lecterns, blackboards and projection facilities. All services (e.g. lavatories, air conditioning, telephones, power) are conveniently extant for all of these rooms. All such terminal building facilities are sound-proofed.

Because modular construction has been used throughout, and occupancy for non-project purposes cannot be forecast, the size and number of terminal building rooms available for educational park purposes can be estimated to vary considerably (e.g. between 50 and 100.)

Rental rates for Delta and Braniff space would have to be negotiated with these airlines. Rental rates for any City office space would be $4.00/sq. ft./yr. inclusive of all normal utilities and services excepting janitorial. Outside ramp rates (e.g. for reserved parking) would be at the aforementioned $0.10/sq. ft./yr.

### 3.2. The Valet Parking Structure

This is a heavy structural frame building without curtain walls, occupying approximately 700 x 80 ft. of ground space. It has 3 stories and a roof level above ground that are capable of heavy loading, and 2 basement levels having larger areas than the above ground structure. The above ground structure includes 296,000 sq. ft., and the basements 600,000 sq. ft. of floor space. All levels include high density, overhead fluorescent lighting, adequate electric power, water service and immediate access to a 30 in. sewer main. Adjoining the surface structure is 75,000 sq. ft. of paved ramp. The entire area is partially secured by chain link fencing.

This facility is owned by Earl Hays Enterprises. (The contact is a Mr. Andrew De Shong.) The City charges the $0.10/sq. ft./yr. rental based on ground (not floor) space occupied by the facility.

Converting this structure to an educational park facility appears to require the addition of curtain walls, interior partitions and finishing, heating/air conditioning, and services peculiar to school buildings (e.g. safety features). From an engineering viewpoint, the structure undoubtedly exceeds school structure requirements. The NW or SW portion of the ground surface level (see figure 1) can be directly used to support an aeronautics cluster equivalent to that at Skyline Center, and the adjoining existing ramp area can be readily extended to connect with Love Field's main runway. Reinforcement of the ramp and removal of some ground floor level structural members would have to be considered if training is to be given on larger aircraft than those now at Skyline.

### 3.3. The Sky Chef Facility

This is an ultramodern building having 38,000 sq. ft. of floor space. Portions include offices directly suitable as educational park offices and classrooms, while the remainder consists of the catering kitchen area and support (e.g. refrigerated storage, loading bays). The building has full service, including air conditioning, and such features as terrazo floors. It appears directly applicable for food services cluster-type instruction.

The building is the property of the City with its construction having been financed by American Airlines via a bond issue.

### 3.4. Parking Space, Security, Safety

There will be available public parking facilities for up to 9,000 cars within reasonable distance of the Valet and Sky Chef installations, in addition to adjoining ramp and other space that could be rented. Existing public parking rates would probably continue at the current level, which could be high for some students.

The City's Aviation Department foresaw no security or safety problems associated with operating an educational park at the Love Field or Redbird sites. In most cases chain link fencing and guard service already exists that would restrict students from dangerous and operations areas. No Love Field structures are in normal flight paths, and new structures at Redbird could be readily situated to minimize any hazard.

# APPENDIX 5

# POLITICAL AND LEGAL CONSIDERATIONS

# I. INTRODUCTION - ORIGIN AND NATURE OF POLITICAL AND LEGAL CONSIDERATIONS

It is conceivable that the Project-resultant school (or schools) could be so situated within one or both of the two largest Metroplex school districts as to be easily accessible only to pupils of the district in which it is located and/or that it would have programs designed only to meet the needs of the containing district's pupils. In that event, there would be, according to SWEP analyses, no difficulties of a political or legal nature significantly different from those which are ordinarily taken into account or encountered whenever a school district seeks to establish an additional new school within its borders.

On the other hand, many of the various possible concepts of the Project-resultant school envisage the probable desirability of having it so located, and its programs so designed, as to serve a prospective student body drawn from areas not limited to a single currently-existing school district but from an area made up of either several geographic segments of (or all of) two or more school districts. In such an event, the participating school districts (their administrative officials and governing bodies) would need to reach agreements as to the various arrangements and mechanisms to be jointly or separately utilized in establishing and operating the school in a manner compatible with objectives and purposes mutually acceptable and beneficial to all the involved districts. There is an almost limitless array of strategies, mechanisms, and arrangements that might be devised and/or included in a plan for such mutual effort; but almost every such arrangement or mechanism that might be selected would, it seems, entail some political and/or legal difficulties or constraints requiring advance recognition and some effort for removal or modification. In the following discussion there are presented some of the "most likely" strategies and

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* Including those arising from both statutory and juridic state law, or from the lack of either statutory provision or judicial precedent, or both.

** "Political" as used in this presentation excludes the involvement of party or narrow partisan politics, but rather refers to decision making (or the acceptance of decisions) by the district body politic, the citizens of the school districts and/or their elected representatives, (the Boards or School Trustees).

## II. ALTERNATIVE STRATEGIES AS DETERMINANTS OF CONSTRAINTS

Strategy No. 1: Consolidation of school districts. Examination and analysis of this strategy has disclosed that its feasibility (the extent of constraints that would be encountered vis a vis the advantages that would accrue) will depend to a large degree on the extent and kind of consolidation contemplated. So, the analysis for each of three consolidation propositions are presented separately.

A. Complete county-wide consolidation -- consolidation of all the school districts in both or in either of the two central counties of the Metroplex into a single large district is the premise assumed here. The general consolidation proposition over the period of the last twenty-five years has received consideration intermittently and identifying and weighing possible and available strategies and arrangements as a basis for a joint decision to proceed.

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A. Complete county-wide consolidation -- consolidation of all the school districts in both or in either of the two central counties of the Metroplex into a single large district is the premise assumed here. The general consolidation proposition over the period of the last twenty-five years has received consideration intermittently and on a recurring basis from various citizen groups and community leaders throughout Dallas and Tarrant counties as a means of ameliorating sundry public school organizational or administrative problems, especially in the financing of the public schools; it is not in any sense a new concept. Consideration of county-wide consolidation has never reached the point where any overt action has been taken to secure its adoption. Strictly speaking, there would be no legal impediments to the adoption of this strategy, for all of the steps to be taken to accomplish this are set out completely in State law: the process of calling and holding the requisite elections, assumption of debt by the new district, and all the other necessary actions to bring about the new larger district on a functional basis. On the other hand, SWEP analysis of the political constraints to be encountered in the pursuit of this proposition has led to the conclusion that the impediments and difficulties would be so extensive and so massive as to render this proposition, for all practical purposes during the time-frame to 1985 or longer, and for either or both of these two particular counties, the least feasible of all possible strategies. The significant political constraints for this proposition stem from the attitudes of the overwhelming majority of the citizens (whose vote on consolidation under existing law would be required) of nearly all of the various school districts, in the larger as well as the medium-sized and smaller school districts. No formal survey of public opinion in respect to county-wide consolidation was made in SWEP studies, but there has been an informal observation of indications of opinion and sampling of opinion by SWEP Staff, including allusions to the question in the various media and expressions of opinion received in the course of personal contacts with school officials, community leaders, and other citizens in each of the school districts of Tarrant and Dallas counties. There is a very strong consensus of opinion against county-wide consolidation as an appropriate solution for any public school problems. However, it should be noted that the reasons given by citizens for opposition to county-wide consolidation, when they feel entirely free to express themselves, vary greatly according to their personal-social circumstances. While neither space (nor the reader's time) will permit a complete enumeration and description of all of the arguments advanced, pro and con, on the issue of county-wide consolidation of school districts, the following most frequently-voiced arguments and typical responses are presented for the benefit of those who may in the future feel a need for reflections of citizen opinion in weighing this to county-wide consolidation was made in SWEP studies, but there has been an informal observation of indications of opinion and sampling of opinion by SWEP Staff, including allusions to the question in the various media and expressions of opinion received in the course of personal contacts with school officials, community leaders, and other citizens in each of the school districts of Tarrant and Dallas counties. There is a very strong consensus of opinion *against* county-wide consolidation as an appropriate solution for *any* public school problems. However, it should be noted that the reasons given by citizens for opposition to county-wide consolidation, when they feel entirely free to express themselves, vary greatly according to their personal-social circumstances. While neither space (nor the reader's time) will permit a complete enumeration and description of all of the arguments advanced, pro and con, on the issue of county-wide consolidation of school districts, the following most frequently-voiced arguments and typical responses are presented for the benefit of those who may in the future feel a need for reflections of citizen opinion in weighing this proposition as a "last resort":

## Expressed Attitudes, Fears, Opinions

### - For Consolidation -

(1) "Financial savings would result from the larger scale of purchasing, tax collection, and other operations, and from elimination of duplication of jobs and services -- a big district is just more efficient and economical than a multiplicity of small ones."

(2) "Better planning can be achieved because of the availability of more expert specialized personnel -- better coordination would result."

(3) "Better (more specialized and comprehensive) educational programs for pupils with special needs can be provided by a large district than can be provided for these kinds of pupils by a small district."

(4) "Desegregation and ethnic integration of schools can be more easily accomplished on a regional basis."

### - Against Consolidation -

(1) "Except for those in the very smallest districts, there would be no real savings. It actually costs more to administer a very large district because of the communications overhead and bureaucratic wastes. The largest districts in the state have a higher per-pupil cost than the medium sized districts."

(2) "It's true that the better-qualified and expert schooling personnel tend to seek larger districts, but they can also be attracted by consortiums and cooperative arrangements between districts which are quite possible without county-wide consolidation."

(3) "While a wider range of programs can be provided for all pupils in a large district than in a very small one, the same can be accomplished by cooperative arrangements between a few districts without having to resort to the kind of 'super district' that

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(3) "While a wider range of programs can be provided for all pupils in a large district than in a very small one, the same can be accomplished by cooperative arrangements between a few districts without having to resort to the kind of 'super district' that would be created by combining all the districts in the county."

(4) "Although it is desirable to integrate the public schools, the best way would be for the ethnic minorities, who have promoted de facto segregation by clustering themselves in the larger cities, to be encouraged to desegregate themselves by moving to the outlying districts of each county. The claim that the

ethnic minorities are 'locked in' the inner cities is not a valid one. Besides, county-wide consolidation is too drastic and too disadvantageous a way of desegregating the schools because overall the pupils would lose more than they would gain educationally."

(5) The most often expressed opposition to county-wide consolidation of school districts has been one enunciated principally by those who live outside of the central-city school districts; and it may be paraphrased as follows:

> Ever since this country was founded there has been a determined effort by keep government as close as possible to the electorate by retaining under local control as much of the civil governmental functions as practical, including the governance of the public schools. There has been a deeply ingrained feeling that keeping a large share of governmental functions under local control is a necessity for participatory democracy to be preserved. And of all the governmental functions, the provision, administration, and operation of the schools, is the one that people most wish to keep under local control. "I'd rather live where I can personally know the school trustees and they can know me -- where I can have some influence in what goes on in our schools -- that's why I moved out here in the first place." "Some school districts are already too large for the average citizen to have any real say in how the schools are carried on and ought to be broken down into smaller units. One of the reasons there's so many frustrated people who feel they don't count in the big cities of this country now is that the unit of government is so large the individual citizen's voice can't be heard." "Even if it costs more, I want my children to go to school where the parents have a voice in how the schools are run which is something we would lack in a county school system." "I moved here from Maryland, where they had a county system, and had to decide whether to live in the city or out here. When we found out this community had its own board of education we decided to 'go suburban'; I've never been sorry. We even attend school board meetings occasionally!"

Chief Justice Burger, in delivering the recent Supreme Court decision in the Detroit desegregation case, acknowledged this basic attitude of the American people regarding preservation of local control of public schools when he said, "No single tradition in public education is more deeply rooted than local control over the operation of schools. Local autonomy has long been thought essential both for the maintenance of

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B. Consolidation of several adjacent districts, including consolidation of a central-city district -- a central-city district consolidation with one or more of its contiguous (but smaller) districts is another of the variations of the district-consolidation proposition to which the SWEP staff devoted analytical consideration. The political constraints for this variation have appeared to be about the same as for county-wide consolidation, but with the following additions, exceptions, and differences:

(1) There is, and would be, some opposition based upon feelings among some citizens of the district (among the consolidating districts) which has the most taxable wealth (on a per-pupil basis or otherwise) that such a consolidation with "poorer" districts would either "water down" or decrease the resources available for the schools in that district or would ultimately require a greater tax burden in order to bring the other districts' schools up to a common quality level.

(2) Citizens of the smaller, contiguous districts are fearful of "big brother" -- fearful of the domination of school affairs by citizens as well as leaders of the larger of the consolidating districts -- and consider that this kind of consolidation would diminish their influence in school affairs, even though the dilution of influence and ability to control decisions would not, in their minds, be as marked or severe as in the case of county-wide consolidation. It should be noted, in consideration of this point, that this "fear of big brother" among the

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municipalities by the larger municipalities rather than resting upon any history of actual friction or taking of unfair advantage in the relationships between school districts. As invalid as it may be, there is definitely a tendency in the minds of many citizens in the suburban areas to transfer animosities and antipathies from "municipality-origin" sources of friction and distrust to the present arena of school affairs! Future planners would need to give serious consideration to this impediment and devise ways of overcoming it, if this kind of consolidation should be deemed necessary.

(3) On the "pro" side of the expressed arguments involved in this kind of district consolidation, is the rather widespread acknowledgement that historically there already has been much of this type of consolidation and that it has been generally helpful in the solution of public school problems. The current jurisdictional situation in local school district structure over the State is the result of many past consolidations. The larger districts, as well as most of the medium-sized school districts of the Metroplex, now include within their boundaries territory that was once divided among several small common and independent districts whose citizens perceived annexation to, or consolidation with, an adjoining district as a solution to their school dilemmas. It is principally because of this aspect of the thinking of concerned citizens, that it has been concluded there would be less opposition to be overcome in the consolidation of one or several districts with a larger district than there would

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C. "Partial" or "layered" consolidation -- partial consolidation of districts has been only scantily used in this State and has received no consideration in the past in these two counties. Reference here is made to the creation of separate districts for the provision of elementary and secondary education systems, or for providing special programs.

This method of structuring school districts has received considerable usage in several other states. The typical arrangement is for a "unified" or "rural high school" district with its own separate board of trustees, taxing authority, and operational apparatus to be superimposed laterally on a base of several smaller districts which provide only elementary education and which have their own separate governing bodies, taxing authority and mechanisms, and territorial boundaries. In effect, voters in this arrangement have dual school district citizenship and vote in the elections of both the high school district (or special district) and the elementary district in which they reside. The main reason this kind of structure has been utilized so little in Texas is that it is rather easy for small districts, under pupil transfer statutes and Texas Education Agency regulations, to "transfer" their secondary pupils to an adjoining larger district (in terms of pupil enrollments) that already operates a more or less comprehensive secondary program. The other principal reason this "special" or "layered" structure of school districts has been resorted to so little in this State has been the fear among the citizenry that creation of another set of administrative machinery and of another taxing authority would result in a drastic increase in total school taxes to be paid. A third reason this structure has received so little utilization is the complexity and extent of legalisms an electorate must endure in order to convert to the layered structure: formulation and circulation of petitions, calling and holding authorizing elections, elections of new boards of education, reestablishment of administrative machinery, proration of existing debt, and the many like kinds of concurrent decisions that must be made, as well as the long public discussions that must be held in order for the electorates to understand the ramifications that are involved. It is a very cumbersome conversion operation! Nevertheless, the consolidation into, or the creation of "special" districts is cited here as a possibility, a "stone to be looked under" in the quest secondary pupils to an adjoining larger district (in terms of pupil enrollments) that already operates a more or less comprehensive secondary program. 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Nevertheless, the consolidation into, or the creation of "special" districts is cited here as a possibility, a "stone to be looked under" in the quest for all possible alternative solutions to be considered by future educational planners. It does overcome two apparent defects in the transfer system, the first being the difficulty that the receiving districts and the sending districts have in deciding on a fair and reasonable tuition or other compensation rate for educating the transfer pupils, and the second being that the citizens of the sending district have little or no official day-to-day voice in the determination of the nature of the secondary education their pupils obtain in the "receiving" district. It may very well be that, at some point in the future, educational planners will wish to examine the "special district" concept (which is, after all, a form of *consolidation*) as a means of providing programs needed but not economically or educationally feasible under present district structure. In that case, the principal *political* constraints to be dealt with will be the voting public's need for complete information concerning the advantages and disadvantages of the prospective realignment and the need for the allowance of sufficient time for the public to "digest and assimilate" the concept as a whole, as well as to digest the specific details and provisions that would be incorporated into the general plan. The main *legal* constraint is the lack of State statutory provision for the creation of *special* school districts; it is believed that legislation to allow for such creation could be, with moderate effort, secured through the Legislature. There already exists statutory provision for the creation of "high school" districts in the State; only minor changes in the wording of those laws would be necessary in order to provide for other special-purpose districts.

*Strategy No. 2: Cooperative arrangements between districts*. This general proposition, like Strategy No. 1, also has many possible variations, several of which will be separately described and analyzed as a means of pinpointing the specific constraints of each as well as of illustrating the nature of the constraints and impediments inherent in the general proposition.

A. A *first* variation of Strategy No. 2 contemplates that two or more school districts would decide to jointly provide and operate *entirely within the borders of one of the districts* all of the specialized educational programs/services needed for certain categories of statutory provision for the creation of special school districts; it is believed that legislation to allow for such creation could be, with moderate effort, secured through the Legislature. There already exists statutory provision for the creation of "high school" districts in the State; only minor changes in the wording of those laws would be necessary in order to provide for other special-purpose districts.

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A. A first variation of Strategy No. 2 contemplates that two or more school districts would decide to jointly provide and operate entirely within the borders of one of the districts all of the specialized educational programs/services needed for certain categories of special-need pupils who reside within any and all of the cooperating districts. For this purpose a facility would be jointly provided either through new construction or the renovation and modification of an existing structure not needed otherwise by the "receiving district", and a tentative general agreement will have been reached for the participating districts to each bear a pro rata part of the cost of the enterprise, based on the proportion of the total pupil enrollment originating in each of the districts. The impediments and constraints that would be encountered in this kind of proposition derive from the specific and essential details and arrangements requisite for implementation. The following three considerations are worthy of further discussion:

(1) Consider, first of all, the problems of vesting authority and responsibility for administration and oversight of the facility and its operation, including decisions as to the curriculum, staffing, supply and equippage, and other matters. The participating districts, analysis has shown, would need to either vest the authority and responsibility for the management of the enterprise in the receiving district or to create a joint "board of control" made up of officials from each of the participating districts and endowed with final authority for administration. Either of these alternatives would entail the relinquishment by the governing bodies of each of the sending districts of at least part of the control of the education of its pupils. This would constitute a serious but not insurmountable political constraint.

(2) Secondly, consider that to give the arrangements permanance, stability, and official and legal standing, there would, perforce, need to be contracts drawn and entered into by the participating districts -- otherwise it would be quite possible for one or more of the districts to be left "holding the sack" if one or more of the districts should decide to withdraw from the enterprise after it is undertaken. But, there is serious question as to the legality and enforceability of contracts entered into by school boards for periods exceeding three years. The only contracts for more than three years that school

"board of control" made up of officials from each of the participating districts and endowed with final authority for administration. Either of these alternatives would entail the relinquishment by the governing bodies of each of the sending districts of at least part of the control of the education of its pupils. This would constitute a serious but not insurmountable political constraint.

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school boards' powers to contract on a long-term basis should be considered as a significant legal constraint to this proposition; and it should motivate those school officials who might give high priority to this strategy to seek clarification of the issue through new State legislation.

(3) Other impediments that could be encountered would be those which arise out of the arrangements for the provision of the facility and its financing. One of these is the doubtful legality of a school district expending public funds (whether tax funds or funds of other origin) for capital outlays (sites, buildings and equipment) outside of its own boundaries. Some jurists have held that the State law only authorizes school districts to provide educational facilities and programs within their own territorial jurisdictions, the only exception being payments made to other education agencies or to another school district for tuition of transfer pupils or for contract pupils, and that in the absence of specific statutory authority for extra-territorial expenditure of capital funds, school districts may not legally make such expenditures. It would be almost essential that this legal impediment be removed either through a court test or through statute revision in the Legislature before several districts could embark on a course of joint financing of facilities under this variation of Strategy No. 2. Other legal and political constraints that would face a consortium of school districts desiring to jointly finance a special-use facility would arise from the ownership of the facility, assuming that its cost could legally be jointly defrayed. A number of questions would need to be answered, including: What share of the equity would each of the respec-

in their own territorial jurisdictions, the only exception being payments made to other education agencies or to another school district for tuition of transfer pupils or for contract pupils, and that in the absence of specific statutory authority for extra-territorial expenditure of capital funds, school districts may not legally make such expenditures. It would be almost essential that this legal impediment be removed either through a court test or through statute revision in the Legislature before several districts could embark on a course of joint financing of facilities under this variation of Strategy No. 2. Other legal and political constraints that would face a consortium of school districts desiring to jointly finance a special-use facility would arise from the ownership of the facility, assuming that its cost could legally be jointly defrayed. A number of questions would need to be answered, including: What share of the equity would each of the respective participating districts have in the facility and how would the shares of the equity be determined? Could one of the districts sell or transfer its share of the ownership to another district? Would the number or proportion of pupils that a district could send to the facility for enrollment and attendance be to any extent contingent upon that district's equity in the facility? Boards of participating districts would not only need to know the answers to such questions but would also need to have acceptance of the answers by their respective constituencies.

B. A second variation of Strategy No. 2 (cooperative arrangements between districts) contemplates that several school districts would decide to jointly provide and to operate the same sort of galaxy of specialized educational programs and services as described under the first variation of the cooperative-arrangement strategy, but to distribute the separate constituent specialized programs, and the facilities needed for such programs, among the various participating districts with each district providing the facilities, staff, and management for the specialized programs allocated to it. Under such an arrangement one district might provide all of the programs (in one facility provided by and within that district) needed for all of the blind-and-deaf secondary pupils residing in the multi-district area; while another participating district would provide (within its boundaries) all of the specialized programs and facilities needed for all of the paraplegic secondary pupils of the entire multi-district area; and, concurrently, a third district might have the responsibility for providing programs and facilities for all of the autistic and emotionally-disturbed pupils of secondary school age residing anywhere in the participating districts. In this manner the responsibility for all of the specialized programs that can not be provided feasibly by any of the individual districts exclusively for their own pupils would be "parceled out" among the several districts, with each district assuming a pro rata share of the cost of each program based upon the number of special-need pupils it would have attending each program each year, calculated on a differentiated program-cost basis, and defraying such costs on a fee payment or tuition basis. The operational concept of the Project-resultant school under this set of provide all of the programs (in one facility provided by and within that district) needed for all of the blind-and-deaf secondary pupils residing in the multi-district area; while another participating district would provide (within its boundaries) all of the specialized programs and facilities needed for all of the paraplegic secondary pupils of the entire multi-district area; and, concurrently, a third district might have the responsibility for providing programs and facilities for all of the autistic and emotionally-disturbed pupils of secondary school age residing anywhere in the participating districts. In this manner the responsibility for all of the specialized programs that can not be provided feasibly by any of the individual districts exclusively for their own pupils would be "parceled out" among the several districts, with each district assuming a pro rata share of the cost of each program based upon the number of special-need pupils it would have attending each program each year, calculated on a differentiated program-cost basis, and defraying such costs on a fee payment or tuition basis. The operational concept of the Project-resultant school under this set of arrangements would be quite different from the concept of a Project-resultant school in which all of its programs are provided at one locale under a unified management scheme; nevertheless, the purpose and product (educated pupils) could be the same. The political constraints for this second variation of Strategy No. 2 would be similar in nature and number to those ascribed above to the first variation, in that acceptance of the arrangements by the respective constituencies would be required. The legal constraints, in respect to the legality of long-term contracts needed to assure functioning of the plan would also be the same and would require the same kind of clarifying actions; but there would not be the impediment attaching to the expenditure of capital funds nor the legal constraint on operating a school outside of a district's boundaries, because no district would be doing so and the capital costs could be calculated on an amortization basis by common consent and included along with the operational costs in computing the total charges for each pupil.

## III SUMMARY

The strategies and alternative arrangements discussed in the preceding paragraphs are only a few of the possibilities that may be given consideration in the process of making definitive decisions relative to the location, functional structure, administration, staffing, and program design of the Project-resultant school or schools; but they serve to substantiate the conclusion that the impediments and constraints that can be expected to be encountered in the establishment of that school will be contingent upon the strategy or plan selected, and that any plan adopted should include provision for overcoming or removing in advance the constraints which will derive from that plan.

No attempt has been made to analyze alternative strategies for financial constraint because it has been assumed that, as a matter of routine, any and every alternative considered will be subjected to a rigorous cost analysis prior to adoption, in terms of the then existing cost factors; that even if this study were to include cost estimates and analyses of educational yields, as of 1974, for each of the alternative models, it would still be incumbent upon the decision makers (and perhaps each of the parties to the decisions) at a later date to have a complete and current update of costs/yields prepared and available before final consideration in the process of making definitive decisions relative to the location, functional structure, administration, staffing, and program design of the Project-resultant school or schools; but they serve to substantiate the conclusion that the impediments and constraints that can be expected to be encountered in the establishment of that school will be contingent upon the strategy or plan selected, and that any plan adopted should include provision for overcoming or removing in advance the constraints which will derive from that plan.

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The following is a recapitulation of the kinds of political and legal constraints and impediments that will require the attention of future planners:

(1) Political constraints centering around the attitudes, fears and beliefs of the citizens and community leaders of the

respective participating school districts in respect to structural and organizational change. The resolution of these constraints will require both -

- (a) much communication between administrative officials and trustees of the various school districts of each county in order to generate common perceptions of common educational needs and a common desire to explore the possibilities for joint action, and
- (b) carefully prepared plans, and execution of plans, for informing the various publics of the advantages and disadvantages of contemplated change in school district operations, to the end that there will be public acceptance of such changes. The latter may, in some cases, depending on the kind and extent of changes contemplated, require, even at best, several years of sustained effort.

(2) Legal constraints, which will need to be resolved through legislative remedy and/or juridic action. These may be grouped as follows:

- (a) Restrictions on the powers and authority of local school boards to enter into long-term contracts with other school districts to provide for extra-territorial education of their respective district pupils.
- (b) Lack of present authorization or statutory prescription for the creation of special or limited-purpose school districts superimposed upon other district structural organizations, when desired and approved by the electorate of an area.
- (c) Restrictions which limit expenditure of capital funds to those for facilities inside of a district.

There may also be needed legislation to authorize school boards to changes contemplated, require, even at best, several years of sustained effort.

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(a) Restrictions on the powers and authority of local school boards to enter into long-term contracts with other school districts to provide for extra-territorial education of their respective district pupils.

(b) Lack of present authorization or statutory prescription for the creation of special or limited-purpose school districts superimposed upon other district structural organizations, when desired and approved by the electorate of an area.

(c) Restrictions which limit expenditure of capital funds to those for facilities inside of a district.

There may also be needed legislation to authorize school boards to jointly create inter-district "boards of control" for the governance of joint educational endeavors and to allow delegation of responsibility and authority to such "boards of control" by district school boards.

Finally, although it has not been discussed in the preceding discourse, it is suggested that appropriate consideration be given to the pursuit of legislation that will provide for either or both of the following:

(d) Temporary consolidation of districts for a stated period of time.

(e) Reseparation of formerly consolidated districts with relative ease.

An unspoken reluctance of citizens of small lightly-populated school districts (which have the potential of becoming sufficiently populated in the future to justify separate existence educationally and financially) is derived from the almost irrevocable nature of consolidation. Many citizens of such small districts would be much more amenable to district consolidation if it were not on a "now and forevermore" basis, but rather on an interim arrangement basis. For example, the citizens of Everman ISD and Kennedale ISD (two adjacent districts with small current enrollments) would probably be much less reluctant to consolidate their districts or to unite with the Fort Worth ISD if the consolidation were to be for a period of 12, 16, or 20 years and if reversion to original boundaries at a future date were part of the consolidation proposition. Numerous similar situations could be cited within the two core counties of the Metroplex where a temporary union of school districts might be mutually beneficial, and welcomed, by the citizens of the involved districts.

## APPENDIX 6

## SUMMARY LOG

## OF SOME

## INTERVIEWS

## BY THE SWEP STAFF

| Date | | Contact With | | | SWEP Staff Involved |
|---|---|---|---|---|---|
| Mo. | Day | Name | Title | Affiliation/ Organization | |
| 8 | 13 | Charles Pettigrew | Assistant Director | Department of Urban Planning City of Dallas | A. Feder |
| 8 | 14 | Dr. John Chumley | Director | Regional Comprehensive Vocational-Technical Planning Project Arlington, Tx. | J. McMath<br>R. Gregg |
| 8 | 15 | M. Howard Megredy | Director of Aviation | City of Dallas | A. Feder |
| 8 | 20 | R. E. Morris, Jr. | Assistant Director of Administration | Department of Public Works City of Dallas | A. Feder |
| 8 | 20 | Michael Warren | | Government Services Commercial Department. Dallas Power & Light Company | A. Feder |
| 8 | 20 | Charles Pettigrew | Assistant Director | Department of Urban Planning City of Dallas | A. Feder |
| 8 | 20 | Bill Walker | Engineer | Industrial Gas Division-Lone Star Gas Co. | A. Feder |
| 8 | 22 | Various | | See Appendix 2 | A. Feder |
| 8 | 27 | Dexter Betts | Director | Program Development-Dallas Community College Dallas, Texas | J. McMath |
| 8 | 28 | Bob Irby | Director, Manpower Development | Texas Employment Commission | R. Gregg |
| 8 | 29 | Frank | Principal | Skyline Center | A. Feder |

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|---|---|---|---|---|---|
| | | | | Vocational-Technical Planning Project Arlington, Tx. | |
| 8 | 15 | M. Howard Megredy | Director of Aviation | City of Dallas | A. Feder |
| 8 | 20 | R. E. Morris, Jr. | Assistant Director of Administration | Department of Public Works City of Dallas | A. Feder |
| 8 | 20 | Michael Warren | | Government Services Commercial Department. Dallas Power & Light Company | A. Feder |
| 8 | 20 | Charles Pettigrew | Assistant Director | Department of Urban Planning City of Dallas | A. Feder |
| 8 | 20 | Bill Walker | Engineer | Industrial Gas Division-Lone Star Gas Co. | A. Feder |
| 8 | 22 | Various | | See Appendix 2 | A. Feder |
| 8 | 27 | Dexter Betts | Director | Program Development-Dallas Community College Dallas, Texas | J. McMath |
| 8 | 28 | Bob Irby | Director, Manpower Development | Texas Employment Commission | R. Gregg |
| 8 | 29 | Frank Guzick | Principal | Skyline Center | A. Feder |
| 8 | 29 | Mark Hughes | Manpower Planning Associate | Office of Manpower Planning North Central Texas Council of Governments Arlington, Texas | J. McMath<br>R. Gregg |

| Date | | | | | |
|---|---|---|---|---|---|
| Mo. | Day | Name | Title | Affiliation/ Organization | SWEP Staff Involved |
| 8 | 30 | Dr. Wayne Hendricks | Superintendent of Schools | Plano Independent School District Plano, Texas | J. McMath<br>R. Gregg |
| 8 | 30 | Joe Farmer | Assistant Director | Education Service Center Region X Richardson, Tx. | J. McMath<br>R. Gregg |
| 8 | 31 | Pyron Bell | Director of Personnel | Bell Telephone | R. Gregg |
| 8 | 31 | Dick Miller | Personnel Office | Texas Instruments | R. Gregg |
| 8 | 31 | Al Nash | Personnel Office | Collins Radio | R. Gregg |
| 8 | 31 | Richard Wilson | Director of Secondary Education | Fort Worth Independent School Dist. | R. Gregg |
| 9 | 3 | Members | | ESAA Committee | G. King |
| 9 | 4 | Bill Ingley<br>Byron Bell | Personnel Management<br>Director of Personnel | Bell Telephone | R. Gregg<br>M. Combs |
| 9 | 5 | Norman Hopkins | Engineering Supervision | Skyline Center | A. Feder |
| 9 | 6 | Elvis Atterbury | Director | Partners in Education | R. Gregg |
| 9 | 6 | Herb Price | | Telecomputer Grid Program | A. Feder |
| 9 | 6 | Harold Gores | President | Educational Facilities Laboratories, Incorporated | A. Feder |

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| 9 | 6 | Elvis Atterbury | Director | Partners in Education | R. Gregg |
| 9 | 6 | Herb Price | | Telecomputer Grid Program | A. Feder |
| 9 | 6 | Harold Gores | President | Educational Facilities Laboratories, Incorporated | A. Feder |
| 9 | 6 | Jack Troster | Director | Corporate Personnel-Texas Instruments Dallas, Texas | J. McMath<br>R. Gregg |
| 9 | 6 | A. L. Nash | Director | Professional Personnel Collins Collins Radio Dallas, Texas | J. McMath<br>R. Gregg<br>B. Combs |

| Date | | Name | Title | Affiliation/ Organization | SWEP Staff Involved |
|---|---|---|---|---|---|
| Mo. | Day | | | | |
| 9 | 10 | Mark Hughes<br>Mark Pross | Manpower Planning Associate<br>Planning Technician | North Central Texas Council of Governments<br>North Central Texas Council of Governments | M. Combs<br>M. Combs |
| 9 | 10 | Various | | Environmental Protection Agency | A. Feder |
| 9 | 11 | Norman Hopkins | Engineering Supervision | Skyline Center | A. Feder |
| 9 | 11 | Gene Davenport<br>Joy Babb | Staff Development and Teacher Centers | Dallas Independent School Dist. | G. King |
| 9 | 11 | Dr. Bennett Miller | Director | Institute for Urban Studies Southern Methodist U. | M. Combs |
| 9 | 11 | Dr. Elvis Atterbury (others) | Director | Partners in Career Education Project Arlington, Texas | J. McMath<br>R. Gregg |
| 9 | 11 | Rogers L. Barton | Associate Superintendent Development Dallas Independent School District | Rogers L. Barton is Chairman of the State Committee on Teacher Certification | G. King |
| 9 | 14 | Dr. Wieman (others) | Chairman | Urban Studies Department, U. of Texas at Arlington Arlington, Texas | J. McMath<br>R. Gregg |
| 9 | 14 | Dr. John Chumley | Director | Regional Comprehensive Vocational Training Project Arlington, Texas | J. McMath<br>R. Gregg |

|  |  |  |  | Agency |  |
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| 9 | 14 | Dr. John Chumley | Director | Regional Comprehensive Vocational Training Project Arlington, Texas | J. McMath<br>R. Gregg |
| 9 | 17 | Dr. H. A. Haswell | Special Assistant to Regional Commissioner | United States Department of Health, Education and Welfare | M. Combs |
| 9 | 18 | C. T. Tindell | Superintendent of Public Instruction | Dallas County Board of School Trustees | M. Combs |

| Date<br>Mo. | Day | Name | Title | Affiliation/<br>Organization | SWEP Staff Involved |
|---|---|---|---|---|---|
| 9 | 21 | Dr. Dewey Mays | Director | Planning Fort Worth Independent School Dist. | J. McMath<br>R. Gregg |
| 9 | 21 | Dr. H. R. Davorak (others) | Assistant to the Principal | General Dynamics Fort Worth, Texas | J. McMath<br>R. Gregg |
| 9 | 21 | Harold Gores | President | Educational Facilities Laboratories, Incorporated | A. Feder |
| 9 | 21 | Chan Robinson | Director of Economic Development | Texas Electric Service Company | J. McMath<br>R. Gregg |
| 9 | 25 | Jim Wells | Director of Industrial Development | Fort Worth Chamber of Commerce | J. McMath<br>R. Gregg |
| 9 | 30 | Rogers L. Barton | Associate Superintendent Development Dallas Independent School District | Rogers L. Barton is Chairman of the State Committee on Teacher Certification. | G. King |
| 10 | 3 | Richard Wilson | Director of Secondary Education | Fort Worth Independent School District | H. Bell<br>J. McMath<br>R. Gregg |
| 10 | 3 | R. M. McAbee | Associate Assistant Superintendent Vocational Education | Fort Worth Independent School District | H. Bell<br>J. McMath<br>R. Gregg |
| 10 | 8 | Members | Executive Team | Dallas Independent School Dist. | G. King |
| 10 | 8 | Members | | ESAA Committee | G. King |
| 10 | 8 | Dr. John Townley | Superintendent of Schools | Irving Independent School Dist. | M. Combs |

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| 10 | 8 | Members | Executive Team | Dallas Independent School Dist. | G. King |
| 10 | 8 | Members | | ESAA Committee | G. King |
| 10 | 8 | Dr. John Townley | Superintendent of Schools | Irving Independent School Dist. | M. Combs |
| 10 | 9 | Newman Smith | Superintendent of Schools | Carrollton-Farmers Branch Independent School Dist. | M. Combs |
| 10 | 10 | Members | Community Relations Committee | Dallas Independent School Dist. | G. King |

| Date<br>Mo. | Day | Name | Title | Affiliation/ Organization | SWEP Staff Involved |
|---|---|---|---|---|---|
| 10 | 10 | Dr. Leo Bradley | Superintendent of Schools | Grand Prairie Independent School Dist. | M. Combs |
| 10 | 11 | Charles N. Wages | Superintendent of Schools | Hurst-Euless-Bedford Independent School Dist. | M. Combs |
| 10 | 11 | James W. Martin | Superintendent of Schools | Arlington Independent School Dist. | M. Combs |
| 10 | 11 | W. G. Thomas, Sr. | Superintendent of Schools | Birdville Independent School Dist. | M. Combs |
| 10 | 11 | Various | Contractors | H & A Corporation (holding company) | A. Feder |
| 10 | 11 | Charles Wages | Superintendent of Schools | Hurst-Euless-Bedford Independent School Dist. | M. Combs |
| 10 | 11 | James W. Martin | Superintendent of Schools | Arlington Independent School Dist. | M. Combs |
| 10 | 11 | W. G. Thomas, Jr. | Superintendent of Schools | Birdville Independent Schools Dist. | M. Combs |
| 10 | 16 | Various | Contractors | H & A Corporation (holding company) | A. Feder |
| 10 | 16 | Dr. Paul Brooks | Superintendent of Schools | Cedar Hill Independent School Dist. | M. Combs |
| 10 | 16 | W. H. Byrd | Superintendent of Schools | Duncanville Independent School Dist. | M. Combs |

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| 10 | 16 | W. H. Byrd | Superintendent of Schools | Duncanville Independent School Dist. | M. Combs |
| 10 | 17 | Dexter Betts | Director, Occupational Programs | Dallas County Community College System | J. McMath |
| 10 | 18 | John Chumley | Director | Regional Comprehensive Vocational-Technical Planning | J. Mc Math |

| Date<br>Mo. | <br>Day | Name | Title | Affiliation/<br>Organization | SWEP Staff<br>Involved |
|---|---|---|---|---|---|
| 10 | 18 | Frank Anderson | Director | Institute of Urban Studies University of Texas, Arlington | H. Bell |
| 10 | 18 | David McKenna | Associate Director | Institute of Urban Studies University of Texas, Arlington | H. Bell |
| 10 | 18 | Fred R. Nickles | Superintendent of Schools | De Soto Independent School Dist. | M. Combs |
| 10 | 19 | F. M. Adams | Superintendent of Schools | Lancaster Independent School Dist. | M. Combs |
| 10 | 22 | Frank Monroe | Superintendent of Schools | Highland Park Independent School Dist. | M. Combs |
| 10 | 23 | Ralph Poteet | Superintendent of Schools | Mesquite Independent School Dist. | M. Combs |
| 10 | 23 | Glen B. Couch | Superintendent of Schools | Garland Independent School Dist. | M. Combs |
| 10 | 23 | Roy R. Parks | Chief Planning Engineer | Dallas Power & Light Company | H. Bell |
| 10 | 23 | T. C. Smith | Specialist | RCA Educational systems, Inc. | A. Feder |
| 10 | 25 | J. F. Fendley | Superintendent of Schools | Wilmer-Hutchins Independent School Dist. | M. Combs |
| 10 | 30 | Bennie Rutherford | Superintendent of Schools | Everman Independent School Dist. | M. Combs |
| 10 | 30 | Willie | Superintendent | Mansfield | M. Combs |

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|---|---|---|---|---|---|
| 10 | 18 | Fred R. Nickles | Superintendent of Schools | De Soto Independent School Dist. | M. Combs |
| 10 | 19 | F. M. Adams | Superintendent of Schools | Lancaster Independent School Dist. | M. Combs |
| 10 | 22 | Frank Monroe | Superintendent of Schools | Highland Park Independent School Dist. | M. Combs |
| 10 | 23 | Ralph Poteet | Superintendent of Schools | Mesquite Independent School Dist. | M. Combs |
| 10 | 23 | Glen B. Couch | Superintendent of Schools | Garland Independent School Dist. | M. Combs |
| 10 | 23 | Roy R. Parks | Chief Planning Engineer | Dallas Power & Light Company | H. Bell |
| 10 | 23 | T. C. Smith | Specialist | RCA Educational systems, Inc. | A. Feder |
| 10 | 25 | J. F. Fendley | Superintendent of Schools | Wilmer-Hutchins Independent School Dist. | M. Combs |
| 10 | 30 | Bennie Rutherford | Superintendent of Schools | Everman Independent School Dist. | M. Combs |
| 10 | 30 | Willie Pigg | Superintendent of Schools | Mansfield Independent School Dist. | M. Combs |
| 10 | 31 | O. C. Mike Taylor | Superintendent of Schools | Grapevine Independent School Dist. | M. Combs |

| Date<br>Mo. | Day | Name | Title | Affiliation/<br>Organization | SWEP Staff<br>Involved |
|---|---|---|---|---|---|
| 10 | 31 | Charles Wages | Superintendent of Schools | Hurst-Euless-Bedford Independent School Dist. | M. Combs |
| 10 | 31 | Leo Bradley | Superintendent of Schools | Grand Prairie Independent School Dist. | M. Combs |
| 10 | 31 | Nolan Estes | General Superintendent | Dallas Independent School Dist. | G. King |
| 10 | 31 | Marvin Berkeley | Dean | College of Business Administration North Texas State University | G. King |
| 11 | 1 | J. J. Pearce | Superintendent of Schools | Richardson Independent School Dist. | M. Combs |
| 11 | 1 | Janet Rankin | Economist | United States Department of Labor | H. Bell |
| 11 | 2 | W. W. Pinkerton | Superintendent of Schools | Coppell Independent School Dist. | M. Combs |
| 11 | 5 | Peggy Dunn | Planning Commission | South Oak Cliff Chamber of Commerce | G. King |
| 11 | 5 | Wade Stanton | Planning Commission | South Oak Cliff Chamber of Commerce | G. King |
| 11 | 5 | Gary Simms | Planning Commission | South Oak Cliff Chamber of Commerce | G. King |
| 11 | 5 | James Rutledge | Planning Commission | South Oak Cliff Chamber of Commerce | G. King |

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|---|---|---|---|---|---|
| | | | | School Dist. | |
| 10 | 31 | Nolan Estes | General Superintendent | Dallas Independent School Dist. | G. King |
| 10 | 31 | Marvin Berkeley | Dean | College of Business Administration North Texas State University | G. King |
| 11 | 1 | J. J. Pearce | Superintendent of Schools | Richardson Independent School Dist. | M. Combs |
| 11 | 1 | Janet Rankin | Economist | United States Department of Labor | H. Bell |
| 11 | 2 | W. W. Pinkerton | Superintendent of Schools | Coppell Independent School Dist. | M. Combs |
| 11 | 5 | Peggy Dunn | Planning Commission | South Oak Cliff Chamber of Commerce | G. King |
| 11 | 5 | Wade Stanton | Planning Commission | South Oak Cliff Chamber of Commerce | G. King |
| 11 | 5 | Gary Simms | Planning Commission | South Oak Cliff Chamber of Commerce | G. King |
| 11 | 5 | James Rutledge | Planning Commission | South Oak Cliff Chamber of Commerce | G. King |
| 11 | 5 | John Horvat | Dean | College of Education North Texas State University | J. McMath |
| 11 | 6 | T. C. Smith | Specialist | RCA Educational Systems, Inc. | A. Feder |

| Date | | Name | Title | Affiliation Organization | SWEP Staff Involved |
|---|---|---|---|---|---|
| Mo. | Day | | | | |
| 11 | 20 | Walter Rambo | Director of Guidance | Texas Education Agency | R. Gregg |
| 11 | 20 | Newman Smith | Superintendent of Schools | Carrollton-Farmers Branch Independent School District | M. Combs |
| 11 | 20 | W.H. Byrd | Superintendent of Schools | Duncanville Indep. School District | M. Combs |
| 11 | 23 | John Townley | Superintendent of Schools | Irving Independent School District | M. Combs |
| 11 | 27 | J.L. Hughes | Assistant Superintendent | Irving Independent School District | M. Combs |
| 11 | 28 | Leo Bradley | Superintendent of Schools | Grand Prairie Independent School District | M. Combs |
| 11 | 30 | Carla Springer | Reporter | Oak Cliff Tribune | G. King |
| 12 | 3 | Curriculum Task Force | | Dallas Independent School District | J. McMath |
| 12 | 4 | William Webster | Assistant Superintendent | Dallas Independent School District | B. Burns |
| 12 | 6 | John Chumley | Director | Regional Comprehensive Vocational- Technical Planning | J. McMath |
| 12 | 11 | Paul Newman and All members of School Council | President | United High School Council | R. Gregg |
| 12 | 11 | Various Students | Superintendent of Student Activities | Dallas Independent School District | G. King |

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|---|---|---|---|---|---|
| 11 | 20 | W.H. Byrd | Superintendent of Schools | Duncanville Indep. School District | M. Combs |
| 11 | 23 | John Townley | Superintendent of Schools | Irving Independent School District | M. Combs |
| 11 | 27 | J.L. Hughes | Assistant Superintendent | Irving Independent School District | M. Combs |
| 11 | 28 | Leo Bradley | Superintendent of Schools | Grand Prairie Independent School District | M. Combs |
| 11 | 30 | Carla Springer | Reporter | Oak Cliff Tribune | G. King |
| 12 | 3 | Curriculum Task Force | | Dallas Independent School District | J. McMath |
| 12 | 4 | William Webster | Assistant Superintendent | Dallas Independent School District | B. Burns |
| 12 | 6 | John Chumley | Director | Regional Comprehensive Vocational- Technical Planning | J. McMath |
| 12 | 11 | Paul Newman and All members of School Council | President | United High School Council | R. Gregg |
| 12 | 11 | Various Students | Superintendent of Student Activities | Dallas Independent School District | G. King |
| 1 | 4 | Oscar Hokala | Project Director | Metropolitan Grant Educational Park San Antonio, Tex. | J. McMath |
| 1 | 4 | Paul Cantz | Assistant Superintendent | San Antonio Indep. School District | J. McMath |
| 1 | 4 | Jim Morgan | Assistant Commissioner | Urban Education, Texas Education Agency | J. McMath |

| Date | | Name | Title | Affiliation/ Organization | SWEP Staff Involved |
|---|---|---|---|---|---|
| Mo. | Day | | | | |
| 11 | 7 | Crandall Young | Assistant Director | Education Service Center Region X | G. King |
| 11 | 7 | Clarende Winn | Superintendent of Schools | Castleberry Independent School Dist. | M. Combs |
| 11 | 7 | Wendal Hoover | Superintendent of Schools | Azle Independent School Dist. | M. Combs |
| 11 | 7 | Howard O. Dunn | Superintendent of Schools | Lake Worth Independent School Dist. | M. Combs |
| 11 | 7 | Glenn D. Reeves | Superintendent of Schools | Eagle Mountain-Saginaw Independent School Dist. | M. Combs |
| 11 | 8 | Charles O. Wages | Superintendent of Schools | Hurst-Euless-Bedford Indep School District | M. Combs |
| 11 | 8 | R.L. Dick Ramsey | Vice President | Texas Electric Service Company | M. Combs |
| 11 | 9 | Nolan Estes | General Superintendent | Dallas Independent School District | M. Combs |
| 11 | 9 | Jim Morgan | Associate Commissioner | Urban Education-Texas Education | M. Combs |
| 11 | 9 | Ralph Poteet | Superintendent of Schools | Mesquite Indep School District | M.Combs |
| 11 | 9 | Gwinn Blanken | Superintendent of Schools | Sunnyvale Indep School District | M. Combs |

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|---|---|---|---|---|---|
| 11 | 7 | Wendal Hoover | Superintendent of Schools | Azle Independent School Dist. | M. Combs |
| 11 | 7 | Howard O. Dunn | Superintendent of Schools | Lake Worth Independent School Dist. | M. Combs |
| 11 | 7 | Glenn D. Reeves | Superintendent of Schools | Eagle Mountain-Saginaw Independent School Dist. | M. Combs |
| 11 | 8 | Charles O. Wages | Superintendent of Schools | Hurst-Euless-Bedford Indep School District | M. Combs |
| 11 | 8 | R.L. Dick Ramsey | Vice President | Texas Electric Service Company | M. Combs |
| 11 | 9 | Nolan Estes | General Superintendent | Dallas Independent School District | M. Combs |
| 11 | 9 | Jim Morgan | Associate Commissioner | Urban Education-Texas Education | M. Combs |
| 11 | 9 | Ralph Poteet | Superintendent of Schools | Mesquite Indep School District | M.Combs |
| 11 | 9 | Gwinn Blanken | Superintendent of Schools | Sunnyvale Indep. School District | M. Combs |
| 11 | 12 | James Rutledge | Chairman | Emergency School Aid Act | M. Combs |
| 11 | 12 | Glenn Reeves | Superintendent | Eagle Mountain Saginaw Indep School District | M. Combs |
| 11 | 12 | Kenneth Payne | Superintendent | Keller Indep School District | M. Combs |

| Date Mo. | Day | Name | Title | Affiliation Organization | SWEP Staff Involved |
|---|---|---|---|---|---|
| 1 | 7 | Officials from NIE | | National Institute of Education | G. King |
| 1 | 4 | Oscar Hokala | Project Director | Metropolitan Grant Educational Park | James G. McMath |
| 1 | 4 | Dr. Paul Cantz | Assistant Superintendent | San Antonio Indep. School District | J. G. McMath |
| 1 | 4 | Jim Morgan | Assistant Commissioner | Urban Education, Texas Education Agency | J. G. McMath |
| 1 | 7 | Officials from NIE | | National Institute of Education | Gerald N. King |
| 1 | 11 | 15 top members Executive Team | Various | Dallas Independent School District Development Division Council Meeting | Gerald N. King |
| 1 | 21 | Texas Education Agency Staff | | Texas Education Agency | G. N. King |
| 1 | 29 | Various | Various | SWEP National Review Committee | G.N. King |
| 1 | 30 | Various | NIE Staff &Advisory Committee | National Institute of Education | G.N. King |
| 2 | 7 | Ms.Dorothy Stuck | Director | Office of Civil Rights, Health, Education & Welfare | Mary Ann Allan |
| 3 | 19 | David R. Vadman Dorman Anderson | Architects | Naramore, Bain, Brady & Johnson | Allen M. Feder |

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|---|---|---|---|---|---|
| 1 | 4 | Jim Morgan | Assistant Commissioner | Urban Education, Texas Education Agency | J. G. McMath |
| 1 | 7 | Officials from NIE |  | National Institute of Education | Gerald N. King |
| 1 | 11 | 15 top members Executive Team | Various | Dallas Independent School District Development Division Council Meeting | Gerald N. King |
| 1 | 21 | Texas Education Agency Staff |  | Texas Education Agency | G. N. King |
| 1 | 29 | Various | Various | SWEP National Review Committee | G.N. King |
| 1 | 30 | Various | NIE Staff &Advisory Committee | National Institute of Education | G.N. King |
| 2 | 7 | Ms.Dorothy Stuck | Director | Office of Civil Rights, Health, Education & Welfare | Mary Ann Allan |
| 3 | 19 | David R. Vadman<br>Dorman Anderson | Architects | Naramore, Bain, Brady & Johnson | Allen M. Feder |
| 3 | 21 | Al Garza<br>"Jimmy" Coronado<br>Mrs. Clark | Attorney<br>Staff member<br>Staff member | Equal Employment Opportunity Commission | Mary Ann Allan |
| 7 | 13 | Jack Andrus | Director of Career Education of Chamber of Commerce | Chamber of Commerce | G. King |

| Date | | Name | Title | Affiliation | SWEP Staff |
|---|---|---|---|---|---|
| Mo. | Day | | | Organization | Involved |
| 11 | 12 | Jack Johnson | Superintendent of Schools | Carroll Ind. School District | M. Combs |
| 11 | 13 | Allen Cannon | Superintendent of schools | Alamo Heights School District San Antonio, Tex. | M. Combs |
| 11 | 14 | Lea Donosky | Reporter | Dallas Morning News | G. King |
| 11 | 14 | Sidney Poynter | Superintendent of Schools | Crowley Indep. School District | M. Combs |
| 11 | 14 | J. W. Teague | Superintendent of Schools | Kennedale Indep. School District | M. Combs |
| 11 | 15 | Leta Mae Gaby | Superintendent | Tarrant County Schools | M. Combs |
| 11 | 16 | Anthony Natale | President | Environmental Consultants Incorporated | M. Combs |
| 11 | 16 | Paul Pearson | Principal | Leonard Middle School | R. Gregg |
| 11 | 16 | Sam Baker | Vice-Principal | Leonard Middle School | R. Gregg |
| 11 | 16 | Gerald Ward | Deputy Superintendent | Fort Worth Indep. School District | R. Gregg |
| 11 | 16 | James Bailey | Assistant Superintendent | Fort Worth Indep. School District | R. Gregg |
| 11 | 16 | Tommy Taylor | Assistant Superintendent | Fort Worth Indep. School District | R. Gregg |
| 11 | 16 | Eugene Hightower | Assistant Superintendent | Fort Worth Indep. School District | R. Gregg |
| 11 | 16 | Jack | Assistant | Fort Worth Indep. | |

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|---|---|---|---|---|---|
| 11 | 14 | Lea Donosky | Reporter | Dallas Morning News | G. King |
| 11 | 14 | Sidney Poynter | Superintendent of Schools | Crowley Indep. School District | M. Combs |
| 11 | 14 | J. W. Teague | Superintendent of Schools | Kennedale Indep. School District | M. Combs |
| 11 | 15 | Leta Mae Gaby | Superintendent | Tarrant County Schools | M. Combs |
| 11 | 16 | Anthony Natale | President | Environmental Consultants Incorporated | M. Combs |
| 11 | 16 | Paul Pearson | Principal | Leonard Middle School | R. Gregg |
| 11 | 16 | Sam Baker | Vice-Principal | Leonard Middle School | R. Gregg |
| 11 | 16 | Gerald Ward | Deputy Superintendent | Fort Worth Indep. School District | R. Gregg |
| 11 | 16 | James Bailey | Assistant Superintendent | Fort Worth Indep. School District | R. Gregg |
| 11 | 16 | Tommy Taylor | Assistant Superintendent | Fort Worth Indep. School District | R. Gregg |
| 11 | 16 | Eugene Hightower | Assistant Superintendent | Fort Worth Indep. School District | R. Gregg |
| 11 | 16 | Jack Billingsley | Assistant Superintendent | Fort Worth Indep. School District | R. Gregg |
| 11 | 19 | R.E. Bob Verinder | Senior Systems Analyst | Lone Star Gas Company | A. Feder |
| 11 | 19 | Fred Nickles | Superintendent of Schools | De Soto Indep. School District | M. Combs |
| 11 | 19 | Debbie White | Reporter | Farmers Branch Newspaper | G. King |

| Date<br>Mo. | <br>Day | Name | Title | Affiliation<br>Organization | SWEP Staff<br>Involved |
|---|---|---|---|---|---|
| 7 | 19 | Attendees of TEA meeting | Various | Texas Education Agency | G. King |

## APPENDIX 7

### Skyline Wide Educational Plan

### THE DECADE OF THE

### 1980's

APPENDIX 7 WAS REMOVED FROM THIS DOCUMENT PRIOR TO ITS BEING SUBMITTED TO THE ERIC DOCUMENT REPRODUCTION SERVICE. SEE EA 007 449.

## APPENDIX 8

## FINANCIAL STATUS REPORT,

## HEW 60 IT

OMB NO. 80-R0180

## FINANCIAL STATUS REPORT

1. FEDERAL AGENCY AND ORGANIZATIONAL ELEMENT

2. FEDERAL GRANT NO. OR OTHER IDENTIFYING NO. OEG-0-73-6583

3. NAME AND ADDRESS OF GRANTEE ORGANIZATION

Dallas Independent School District
3700 Ross Avenue
Dallas, Texas 75204

4. EMPLOYER IDENTIFICATION NO. Vendor 426170

5. GRANTEE ACCOUNT NO. OR IDENTIFYING NO. T36E018

6. FINAL REPORT ☐ YES ☒ NO

7. BASIS OF REPORT ☐ CASH ☒ ACCRUED EXPENDITURES

8. PROJECT PERIOD (Month, Day, Year) FROM July 1 1973 TO June 30 1974

9. REPORT PERIOD (Month, Day, Year) FROM April 1 1974 TO June 30 1974

| 10. STATUS OF FUNDS | PROGRAMS - FUNCTIONS - ACTIVITIES (1) | (2) Purchased Ser | (3) Supplies | (4) Capital | (5) Other Operating | (6) | TOTAL |
|---|---|---|---|---|---|---|---|
| a. Total outlays previously reported | 81,769.00 | 3,485.00 | 4,197.00 | 5,384.00 | 4,001.00 | | 98,836.00 |
| b. Total program outlays this period | 33,445.00 | 11,028.00 | 1,225.00 | -0- | 1,134.00 | | 46,832.00 |
| c. LESS: Program income credits | -0- | -0- | -0- | -0- | -0- | | -0- |
| d. Net program outlays this period | 33,445.00 | 11,028.00 | 1,225.00 | -0- | 1,134.00 | | 46,832.00 |
| e. Total program outlays to date | 115,214.00 | 14,513.00 | 2,972.00 | 5,384.00 | 5,135.00 | | 143,218.00 |
| f. LESS: Non-Federal share of program outlays | -0- | -0- | -0- | -0- | -0- | | -0- |
| g. Total Federal share of program outlays | 115,214.00 | 14,513.00 | 2,972.00 | 5,384.00 | 5,135.00 | | 143,218.00 |
| h. Total unpaid obligations | -0- | -0- | 2,033.00 | -0- | -0- | | 2,033.00 |
| i. LESS: Non-Federal share of unpaid obligations | -0- | -0- | -0- | -0- | -0- | | -0- |
| j. Federal share of unpaid obligations | -0- | -0- | 2,033.00 | -0- | -0- | | 2,033.00 |
| k. Total Federal share of outlays and unpaid obligations | 115,214.00 | 14,513.00 | 5,005.00 | 5,384.00 | 5,135.00 | | 145,251.00 |
| l. Total Federal funds authorized | 139,477.00 | 15,750.00 | 13,000.00 | 6,000.00 | 26,947.00 | | 201,174.00 |
| m. Unobligated balance of Federal funds | 24,263.00 | 1,237.00 | 7,995.00 | 616.00 | 21,812.00 | | 55,923.00 |

11. INDIRECT EXPENSE: a. TYPE OF RATE (Mark box)
☐ PROVISIONAL ☐ FINAL
☐ PREDETERMINED ☐ FIXED
b. RATE
c. BASE
d. TOTAL AMOUNT
e. FEDERAL SHARE

12. REMARKS (Attach additional sheets if necessary)

Project Completion date has been extended to August 31, 1974. Letter of authorization dated April 8, 1974.

13. Certification - I certify that to the best of my knowledge and belief this report is correct and complete and that all outlays and unpaid obligations are for the purpose set forth in the grant award documents.

| NAME | TITLE | TELEPHONE AREA CODE | NUMBER | EXT. |
|---|---|---|---|---|
| Gerald King, | Deputy Asst Supt. | 214 | 742-9214 | |

SIGNATURE OF AUTHORIZED OFFICIAL

DATE REPORT IS SUBMITTED

HEW-601T

## APPENDIX 9

## SWEP EVALUATION REPORT NO. 2

APPENDIX 9 WAS REMOVED FROM THIS DOCUMENT PRIOR TO ITS BEING SUBMITTED TO THE ERIC DOCUMENT REPRODUCTION SERVICE.
SEE EA 007 348.